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Archaeological Journal.

PUBLISHED UNDER THE DIRECTION OF

THE CENTRAL COMMITTEE

OF

The Royal Archaeological Institute of Great Britain and
Ireland,

FOR THE ENCOURAGEMENT AND PROSECUTION OF

RESEARCHES INTO THE ARTS AND MONUMENTS

OF

The Early and Middle Ages.

25806

VOLUME XXV.

LONDON:

PUBLISHED AT THE OFFICE OF THE INSTITUTE, 16, NEW
BURLINGTON STREET, W.

(DISTRIBUTED GRATUITOUSLY TO SUBSCRIBING MEMBERS.)

TO BE OBTAINED THROUGH ALL BOOKSELLERS.

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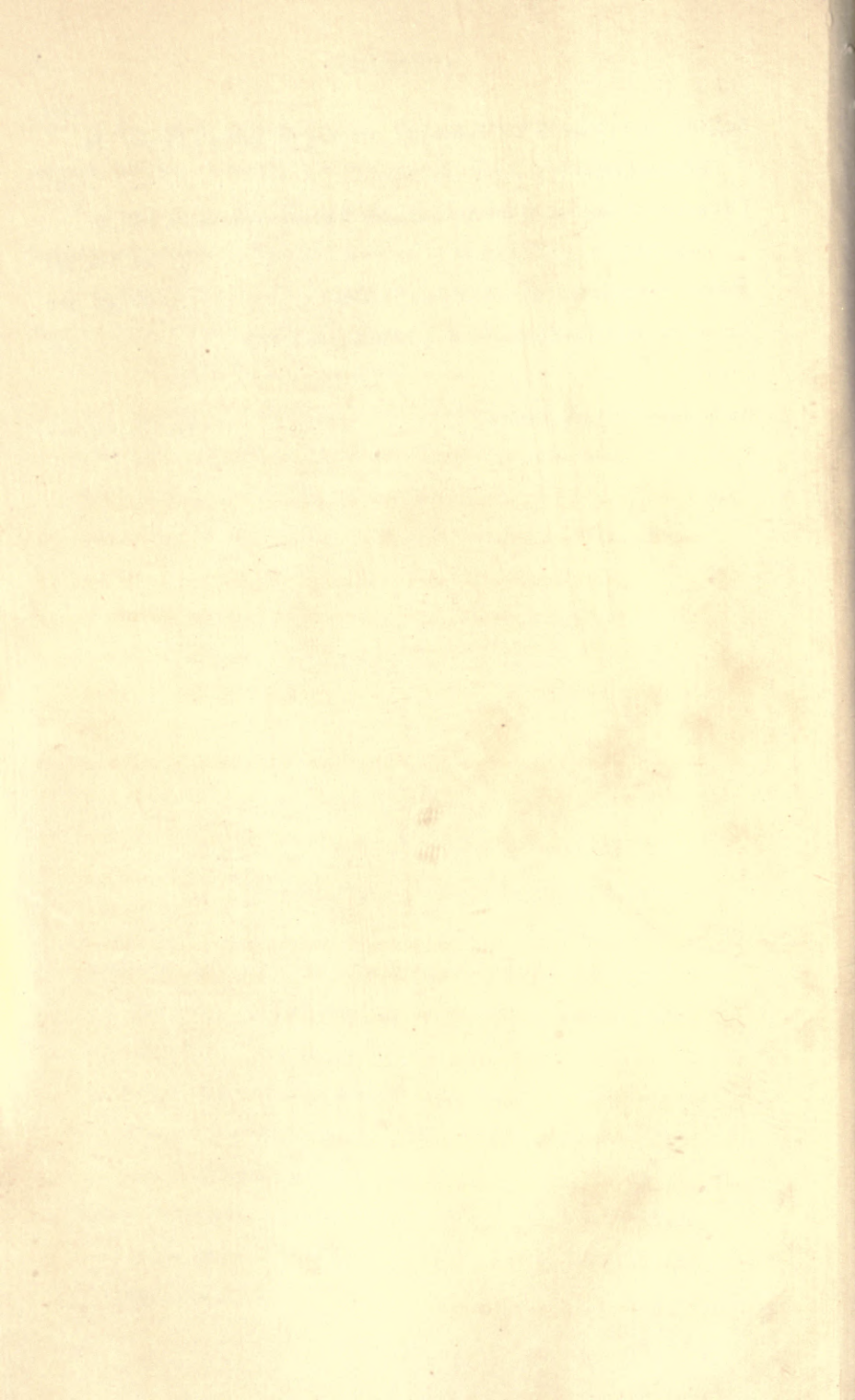
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NORMAN SCULPTURE OF LINCOLN CATHEDRAL.



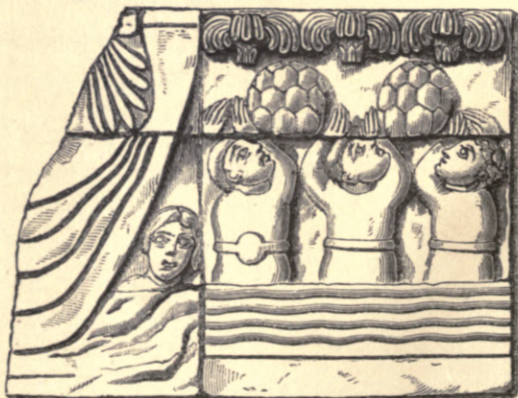
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The Archaeological Journal.

MARCH, 1868.

THE NORMAN SCULPTURE OF LINCOLN CATHEDRAL.¹

By the VEN. EDWARD TROLLOPE, M.A., F.S.A., Archdeacon of Stow.

IT is singular that up to the present time so little is known of the more ancient sculptures displayed upon the west front of Lincoln Cathedral. These constitute a series of subjects which can scarcely escape the notice even of a casual observer, as it comes within an easy reach of the eye, and through the depths of its shadows as contrasted with its prominent light-catching portions, courts enquiry from all entering any one of the western portals of that venerable pile which it serves to adorn. Enquiring looks are indeed usually raised towards these sculptures; but as yet little has been done towards their elucidation, so that only here and there certain subjects have been detected, while the remainder still demand explanation; it will now, therefore, be my object to endeavour to grasp the key unlocking the secrets of that work of ancient art which has so long adorned the west front of our beauteous queen of English cathedrals. Those who have attempted to describe these sculptures have either omitted to make any comments upon their difficulties, or have left their elucidation to the discernment of future observers. Their approximate date even has not been agreed to by former examiners, some attributing them to the Saxon period, some to the Norman. Of these, Gough, Wild, and even Cockerell, deemed them to be Saxon, whereas they undoubtedly are, from their own internal evidence and style,

¹ Communicated to the Section of Antiquities at the annual meeting of the

Institute at Kingston-upon-Hull, July, 1867.

if indeed so old, not older than the time of Remigius of Fécamp, Bishop of Lincoln, in whose episcopate the see was removed from Dorchester, about A.D. 1078. Some persons, it must be observed, have considered these relics of art as belonging to the time of the successor of Remigius, Robert Bloet, in whose days the church was consecrated, or to that of Bishop Alexander, early in whose episcopate the cathedral was greatly damaged by a conflagration, and by whom the nave was vaulted with stone.² Amongst similar works in England with which the Lincoln sculptures may be compared are two bas-reliefs of nearly contemporary date in Chichester Cathedral.³ The figures in those sculptures are treated in the same peculiar style, and over one of them is a cornice, on which the honeysuckle ornament resembles that over some of the Lincoln sculptures. By the kind courtesy of Mr. Murray I am enabled to present representations of these relics of art, representing our Lord at the gate of Bethany, and the Raising of Lazarus (p. 20 *infra*) These are assumed to have been brought from the Saxon cathedral at Selsey, but they are probably later than the Lincoln sculptures,

² Essex, in his Observations on the Cathedral communicated to the Society of Antiquaries in 1775, notices these sculptures. "The difference of the workmanship, and the irregularity in which they are placed, make it probable they were brought from some old church, and placed in this front when it was first built." *Archæologia*, vol. iv. p. 152. It thus appears that Essex regarded them as of greater antiquity than the work of Remigius. The same notion is stated in the letter-press that accompanies two plates of the west front, *Vetusta Monum.* vol. iii. pl. x. xi., from measurements taken by Mr. Lumby, clerk of the works of Lincoln Cathedral. Wild, in his *Architecture and Sculpture of Lincoln Cathedral*, p. 16, alludes to the notion that the sculptures are "of Saxon workmanship, an opinion less sanctioned by their want of merit (for they are not below the standard of the eleventh century) than by their irregular insertion in the walls, which nevertheless is as likely to have been occasioned by their removal from some other part of the Cathedral, when rebuilt in the twelfth century, as from any older church." Professor Cockerell, in the Appendix to his *Iconography of the West Front of Wells Cathedral*, p. 82, observes that he "should entirely subscribe to the opinion that this frieze

is of Saxon workmanship," and suggests that it might have been transported from Dorchester, the site of the ancient see, or from some previous church in Lincoln, which, as a flourishing town long before Christianised under Saxon rule, must have possessed conspicuous churches already.

³ The highly curious sculptures in the South choir-aisle of Chichester Cathedral are figured in the Translation of Labarte's *Handbook of Mediæval Arts*, pp. 5, 6, where they are ascribed to the tenth or eleventh century. The woodcuts there given have also been reproduced in this *Journal*, vol. xii. p. 412, and in the *Handbook to the Cathedrals of England* (London, Murray, 1861), part II., p. 312, pl. ix. It is observed that they are probably early Norman, with indications of being by a foreign artist; a certain Byzantine character may be traced in the hair, in the narrow folds of the drapery, and perhaps in the tall slender figures. Two fragments in Sompting church, Sussex, are noticed, which may be compared with the Chichester sculptures. There is also a small sculpture of the like early character inserted in the wall of the tower of Barnack church, Northamptonshire, not without value for comparison with the relics of Norman art at Lincoln.

and were perhaps carved, during the first quarter of the twelfth century, by order of Bishop Radulphus, who commenced the building of his cathedral at Chichester, A.D. 1114. The most crude ideas have been promulgated as to some of the sculptures at Lincoln, although, of course, others have been recognised, such as Noah's ark and Daniel in the lions' den. The learned Warton thought that he detected in the former the legend of Birinus;⁴ another author has suggested that in these sculptures pagan fables are blended with scriptural truth, and a third that the figures of friars and nuns appear among them; whereas certainly no reference is made to Birinus in any of the sculptures, none but scriptural subjects are here displayed, and there is not a single friar or nun represented. The series has been engraved by Gough for his edition of Camden's *Britannia*;⁵ but the meaning of its groups of figures, and their connection with one another, has never, I believe, been understood, and remains unexplained. As, however, I feel satisfied that an elucidation of the series is possible, after a careful and near examination of its details, a comparison between those details nearly lost through the ravages of time or violence with more perfect portions, and by the valuable aid of photography, I am about to submit what I conceive to be a true explanation of these sculptures. It may deserve mention that during the recent works of restoration of the west front of the cathedral I was enabled by means of the scaffolding then erected to obtain a series of photographs from which the accompanying woodcuts have been prepared.

⁴ Gough, in his account of the font in Winchester Cathedral (*Vetusta Monum.* vol. ii. p. 6), alludes to the suggestion by the learned writer of the "History of Poetry in England," that the Lincoln sculptures related to the legend of Birinus, at that time supposed to have supplied the subjects of the sculptures at Winchester. St. Birinus exercised episcopal functions at Dorchester in Oxfordshire, and was there buried. Remigius, it will be remembered, was the last bishop of that see, and the first of Lincoln: it appeared probable that he might have selected incidents in the history of so eminent a preacher of Christian faith, as his predecessor Birinus had been, to decorate the Cathedral newly erected at Lincoln. A certain similarity in some details doubtless gave weight to this suggestion; the subjects at Winchester,

however, although of smaller proportions than those at Lincoln, may claim comparison with them as exemplifying the character of Norman art. They are now recognised as taken from the legend of St. Nicholas. A font almost precisely similar, and presenting subjects from the same legend, exists at Zedelghem, near Bruges, and is figured by De Caumont, *Bulletin Monumental*, vol. xxi. p. 471.

⁵ Gough states that the three figures forming the fourth group in the Torments of Hell described hereafter, No. 12, were "cut a few years ago to supply the place of older; and there were two more groups too imperfect to merit copying." He adopts the suggestion of Essex, that the sculptures were brought from some old church. Camden's *Britannia*, edit. 1806, vol. ii. p. 368, pl. xi.

It will be remembered that a pyramidal group of five arched recesses is the principal feature of the Norman west front of Lincoln Cathedral, the lower part of the three larger recesses being pierced by doorways, and the subsidiary one on either side constituting an ornamental appendage. These three doorways have been attributed to the times of Alexander, Bishop of Lincoln, 1123—1148. The series of sculptures I have now to explain passes just above the arches of the smaller recesses, and is continued along the sides of the piers of the principal recesses, always in the same horizontal line, but in variable continuity. In addition to these there is an insulated subject on the southern face of the Norman south-western tower, which can now only be seen from within the area on the south created by the extension of the west front during the early part of the thirteenth century. That these sculptures are Norman appears from their characteristics, the disproportionably large heads and the flat faces of the figures, also from their spare forms and ill-proportioned members; yet the treatment of some of them is worthy of comparison with a better period of mediæval art, and occasionally a classical treatment of the drapery seems to indicate that the influence of Roman art had not absolutely been lost in England when these sculptures were executed. Such works of art of the eleventh and twelfth centuries are now most rare, and none can be compared with this as to the extent of the subjects treated of and their peculiar character, so that few observant persons have approached the west front of Lincoln Cathedral without having had their curiosity excited respecting that storied band above them, although they have not conjectured why it was placed there; while by others it has been regarded simply as a grotesque specimen of early art, half destroyed by long exposure to the weather; and, indeed, it is curious through its antiquity, but its chief value arises from the fact of its being an exposition of scripture set forth seven or eight hundred years ago, either by Remi, or Remigius, the first Norman Bishop of Lincoln, or by his successor Alexander, one or other of whom so thoughtfully moulded the very stones of his cathedral church as to constitute a sermon abounding with pure truth, portions of which still remain to denote its original fulness when complete and rightly arranged. The series has since been dislocated, like a manuscript whose

leaves, after having been torn from their original binding, have again been in part collected and re-bound without any regard to their first and proper sequence, for now we have only portions of the series, and these are arranged without reference to their chronological order. At first they probably constituted a series extending at least along the whole of the west front in unbroken order, and contained many more subjects than at present. One of the most important of these appears never to have been removed, viz., that over the northernmost recess, as it is continued within the adjoining larger recess, and the whole seems to have been composed for this particular spot; but most, if not all the others, have been freshly arranged, and this probably during the re-building of the Cathedral under St. Hugh and his successors. When complete they appear to have formed a sculptured exposition of the Christian faith, gathered from both Testaments; and such an exposition, whether pictured on the walls or in the windows of churches, carved in wood, or sculptured in stone, would still not only be admissible in any of our greater churches, but profitable to their frequenters as lively illustrations of God's Holy Word. Exclusive of a subject now destroyed, except the lower portion of a draped figure, there are twelve scriptural subjects still left, seven of which are taken from the Old Testament, and the remainder from the New. They vary considerably in width, but are mostly 3 ft. 5 in. in height. They are protected by a plainly chamfered cornice, which has rendered them valuable conservative service. As they are now arranged in no sort of order, I shall describe them according to their proper sequence, heading each subject with its title, and the text or texts it is intended to illustrate.

1. The Expulsion of Adam and Eve from Paradise—(Genesis iii. 24).—This sculpture has been tampered with, and now presents a sadly smoothed appearance, through the loss of its original minor characteristics. It represents, in a very expressive manner, one of the cherubim casting out our first parents from their happy dwelling-place. The deep despondency of the unhappy pair is well denoted by their wistful back-turned looks, their downcast arms and clasped hands, as they retire at the command of God's minister appointed to expel them from Eden, and thus to keep them from approaching the tree of life. That guardian spirit is

represented with wings, and clothed in a long robe having ample sleeves and a mantle. In his right hand he bears the flaming sword, and his left hand, with extended palm, is placed upon Adam's shoulder, for the purpose of compelling him to leave his first home in Eden. There is considerable dignity given to this figure, but the others are ill-proportioned and weak.

2. The Curse of Man because of his Disobedience—(Genesis iii. 17, 18, 19).—This subject is illustrated by the representation of two men engaged in manual labour, and dressed alike in tight-fitting tunics reaching to the knees. The one to the right has a beard and long hair. In his hands is a spade, which he is forcing into the ground with his right foot. It is remarkable that this spade resembles, as to shape, some represented in the Bayeux tapestry. The figure on the left holds an axe, required to clear the ground previous to spade-culture. Tufts of conventional foliage appear beneath these figures, and above is a cornice of carved work of a rich foliated design. In the right-hand upper corner beneath this cornice, a hand grasping a bag is introduced, probably intended to denote God's providence for his people, and his care for all their wants, although labouring under a curse through Adam's transgression.

3. The Building of the Ark—(Genesis vi. 14).—This very interesting sculpture portrays Noah, in dutiful and faithful obedience to God's command, in the act of working at the ark, aided by an assistant, probably intended for one of his sons. Noah wears a girdled tunic having tight-fitting sleeves, and ankle-shoes. His hair is rather short, as are his curling whiskers and beard. In his left hand he holds an axe, or a hammer, which he supports upon his shoulder, and he stretches out the other towards his assistant workman with the fore finger extended, as though in the act of giving instructions. The comparative youthfulness of the other figure is indicated by the absence of a beard and his inferior size; he is dressed in a shorter tunic, having the usual breast opening, and holds a hatchet with both his hands. Between these figures a portion of the ark is seen, whose lofty prow and planked sides were probably suggested by the features given to vessels of the eleventh century, and perhaps even by that supplied by Remigius himself to the Conqueror for the invasion of England. Such continued to



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be the mode of representing this subject for centuries after the time of Remigius, and from its importance it was, of course, very often repeated, as being so strongly typical of the ark of Christ's Church, and the salvation thus freely offered to all men, as well as of the necessity for building up that ark through the preaching of the gospel, and for raising material structures wherein God's holy name might be worshipped. On one of the incised slabs of the thirteenth century, forming a part of the pavement of the church of St. Remi, at Rheims, the building of the ark is similarly treated.⁶

4. The Effects of the Flood—(Genesis vi. 7 ; vii. 23).—In unhappy contrast with the faithful Noah building the ark for his preservation, and that of his family, his security therein and his thankful exit from it, this subject portrays the end of the ungodly, who would not hearken to his patient exhortations. It has been saved from exposure both to the weather and the soot-laden breezes of the Lincoln atmosphere through its enclosure within the subsequently built portion of the west front of the Cathedral. To the left of the subject is seen the lofty prow of the ark floating upon the rising waters, which are indicated by the waved lines below. From these rise three half-submerged human figures dressed in tight tunics girded round their waists, who with upraised hands and arms are vainly attempting to save themselves by clinging to such objects as still remained above the water-floods, whether rocks or trees. Just beneath the prow of the ark is the figure of a man either floating or swimming, indicative of the hopeless efforts to escape on the part of the wicked, when all flesh perished except the happy occupants of the life-preserving means of salvation provided by God through the instrumentality of Noah.

5. The Entry into and the Departure from the Ark—(Genesis vii. 7, 8, 9).—In this subject, which is nearly 7 ft. long, the ark is represented as a whole, the lower portion taking the form of a plank-built vessel of the eleventh century, with its stem and stern curving upwards to a considerable height. These support a roof partly covered with shingles having rounded edges. Resting on the left side of this roof is the returned dove before she was pulled into the ark again by Noah. Within are five seated figures, probably

⁶ *Archæol. Journal*, vol. xi. p. 39.

intended to represent Noah, his wife, and his three sons, which are as many as could be conveniently introduced. The central one, with a long beard to denote his age, and his hands upraised, is no doubt intended for Noah, then 600 years old. The two figures to the right are raising up their arms and clasped hands in grateful prayer. The one on the left of Noah is in an attitude of contemplation, and supporting his left elbow with the right hand, rests his chin upon his left hand. The remaining figure has upraised hands like those of the others. On the outside of the ark a line of animals on a very small scale is seen following one another into the ark. The heads of the first in the procession are alone cut, and these not according to the Scripture narrative, in pairs, viz., the ox, the ass, and the goat ; those that follow are on a still smaller scale, and are not distinguishable. On the right of the ark a subsequent incident is illustrated, viz., the departure from that means of salvation. This consists of two groups, one containing eight figures, four above and four below, the other two only. Of the first group the figure furthest from the ark below is that of a male in a mantle, whose skirt he holds back with his right hand, while he points to the freshly dried surface of the earth with the other. On his feet are ankle-shoes. The next figure represents his wife, who rests her right hand upon her husband's left shoulder, and embraces him with her left arm. She wears a hood upon her head, and a mantle over her gown. The two next figures and that above nearest to the ark represent females similarly attired. The two figures of the second group are on a larger scale, and have been thought not to have any reference to that with which it is conjoined, but from the evidence of a hand of one of the figures of the larger group which impinges upon the stone of the second, we are assured of the connection. This subject, therefore, we may presume, portrays the giving of that gracious covenant which God was pleased to make with Noah, and his assurance that "the waters should no more become a flood to destroy all flesh." One of these figures has long hair flowing upon his shoulders, and a nimbus ensigned with a cross above his head, to indicate his divinity. His left arm crosses his person, and with his right hand upraised he is earnestly addressing the person by his side. He wears the robe and mantle usually given to all the figures of such sub-

jects. The other figure is bearded and similarly attired, but has no nimbus ; he holds up his joined hands in reverence. In the incised subjects in the church of St. Remi at Rheims, before referred to, a dimidiated figure of God appears in the sky above the ark precisely like the figure in this sculpture, with long flowing hair, and a crossed nimbus, which was indeed the usual way in which the First person of the Trinity was represented during the eleventh and twelfth centuries, as well as our Lord.⁷

6. Hannah and the Infant Samuel : Samuel announcing God's Revelation to Eli (1 Samuel i. 18).—These two subjects appear on one stone ; the first-named being above the other, and quite distinct from it. This represents a female reclining upon her left side in bed, and supporting her head with her left arm, whilst with the other she assists her infant, represented without clothing and on his knees, in the act of deriving nourishment from his mother's breast. The upper portion of the female is naked, except a hood or kerchief upon her head, which falls in folds upon her shoulders, but the greater part of her person is covered with the bed-clothes. Above this is a cornice of well-designed and effective foliated work, and a small piece of foliation appears on the right side of the subject, for the purpose of filling up a blank there. The lower subject is much mutilated in parts. On the left is a robed figure of a man seated on a throne or chair of state, with his legs extended and his feet appearing beyond the edge of his robe, which is cut square at the breast. The face, and indeed the greater part of the head, is gone, but there seems to have been a cap with a pendent flap upon the head. The openings of the sleeves at the wrists are large, as seen by that hanging from the right wrist. This arm is bent back, and apparently holds a staff, whose end rests upon the ground, or else seeks support from a pillar behind him. In front of this seated figure stands a lad with his legs apart, and supporting his left elbow with his right hand. He is dressed in a tunic reaching just below his knees, and confined round the waist by a girdle, whence it falls in full folds. This figure was originally represented as holding something extending from the hand towards the seated figure, of which there are now only slight remains. That object, from the evidence of what now exists, was

⁷ Archæol. Journal, vol. xiii. p. 39.

apparently either a censer or a label ; and if these two subjects were intended to represent Samuel and his mother before he was weaned and presented to the Lord, and Samuel announcing the doom of Eli's sons, some words indicative of their sentence probably appeared upon the label, if it was a label.⁸

7. Daniel in the Lions' Den (Daniel vi. 16).—This subject is rudely framed with pieces of the same plainly-chamfered string or moulding which only appears above the other sculptures. It portrays the calm confidence of Daniel during the terrible night he was compelled to spend in the lions' den. He is represented in a sitting posture, with his right hand raised towards Him in whom he had placed his trust, and with a book in his left hand—probably intended for the book of God's law. His hair is short and crisply curled ; he is clothed in an ample robe reaching to the feet, and hanging in many minute folds about his body and below his knees. Over this is a mantle, covering the upper portion of his person, in continuous folds and depending from his elbows to the ground. In the right-hand corner, below the figure of David, are two lions' heads, another appears in the opposite corner. Above are two large dimidiated lions crossing one another behind Daniel, with their paws extended as though to exhibit their natural longing to attack the prophet, and the restraining power of God, who through his angel shut the mouths of these lions because before Him innocence was found in Daniel, and before the King he had done no hurt. The treatment of the lions' manes is very similar to that of the numerous sculptured lions found by Layard at Nineveh.

8. Christ Instructing a Disciple, possibly Nicodemus (John iii. 14, 15).—This subject consists of two figures only, of a larger size than those of most of the others. One of these is certainly intended to represent our Lord, from the nimbus ensigned with a cross around his head. The hair flows upon the shoulders, and the beard is short. The robe has no opening at the breast, and is girded round the waist,

⁸ This subject, it may deserve notice, has suffered much injury, and, until closely examined when the scaffolding was placed during recent repairs of the Cathedral, its details were with difficulty to be discerned. It was supposed by Professor Cockerell to represent the death

of Isaac, with the accompanying figures of Jacob, Esau, and Rebecca. *Iconography of Wells Cathedral*, Appendix. p. 82. Gough seems to have regarded it as the death of Adam. *Vetust. Monum.* vol. ii. p. 7.



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whence it falls in graceful folds nearly to the feet, which are bare. Over this is a mantle, not fastened at the neck; a part hangs in a lappet form over the left shoulder. The right hand, with extended fingers, rests upon this lappet, and the left is raised with the thumb and fore finger pointed upward, and the other fingers depressed in an attitude of earnest exhortation. To the right of this figure is one of a disciple without the distinguishing nimbus, and having a short beard and short hair. He wears a robe or tunic and girdle, similar to that of his Divine Master, reaching nearly to the feet, and over this a long mantle fastened at the neck, and covering the shoulders. His hands are devoutly crossed as he listens to his Lord's holy words. It cannot be positively determined that this subject was intended to represent the interview between Christ and Nicodemus; but no other can be named with more probability.⁹

9. Christ Sitting at Meat with the Two Disciples at Emmaus (Luke xxiv. 29, 30).—This sculpture, placed on the right-hand side of the principal recess of the west side of the cathedral, is in almost as perfect a state as when it was first carved, and is especially valuable from the architectural features introduced into it, which serve to identify the date of the whole series of sculptures. This subject represents our Lord, after his resurrection, seated under a portico or external arcade of a house whose elevation is indicated behind by four square turrets furnished with low conical roofs, terminating in small spherical finials. One angle pillar of this building is alone given, whose details are Norman. Beneath the arcade is suspended a curtain, the folds are tightly gathered back on either side. Below this are figures of our Lord and the two disciples seated at a table covered with a cloth, whose pendent portion in front is gathered up into regular folds at even distances, and beneath are seen the legs and feet of those sitting at table. Christ is represented with short curling hair and a short beard, with one hand raised in the attitude of blessing, and the other holding a knife with which He is about to divide a small loaf placed before Him. He is clothed in a mantle,

⁹ It has been suggested that possibly this subject may illustrate the discourse of Our Lord with St. Peter, Matt. xvi. 18, "Tu es Petrus," or his last injunctions to that Apostle after the re-

surrection, John xxi. 15. It should be observed that at the early period to which these sculptures belong, the apostles are not always distinguished by any conventional symbol.

the folds of which are confined at the neck, before they flow over his shoulders. On the left is the figure of a disciple, who, in addition to a short beard, wears a moustache. He is also habited in a mantle. His right hand rests upon the table in front of him, and in his left he holds a cup, resembling the mediæval mazer, shaped like a small basin, which he is raising to his mouth, and similar to another on the table before Christ. On the other side the likeness of a younger disciple is carved. His hair is smooth, and curls only at its extreme ends ; he wears neither moustache nor beard. The folds of his mantle fall across his breast in a thoroughly classical manner, and are gathered up on his shoulder by the aid of a fibula. The hair of all three figures has been painted a deep bright red, but probably this was at first toned down by other more delicate tints ; the inside of the mantle of the central figure was also painted a light blue, or a blue green. In the lateral arch of the portico is a lion's leg and paw serving as a support to the "*sella longa*" on which our Lord and the disciples are seated ; and above, as if projecting from the portico column, are three small heads of animals, which probably are meant to express the ornamental finials of the back of the seat, and to stand for lions' heads.

10. The Blessed End of the Righteous contrasted with the Torments of Lost Souls (Matthew xxv. 46).—In this subject the death of a righteous man is strongly contrasted with the end of the wicked. Above, a dying man laid upon a bed is in the act of rendering up his soul to his Maker. The upper portion of his person, seen above the bed-clothes, is naked. The head has perished, but the arms and hands joined in prayer still remain perfect. Over the dying man's couch are two ministering angels, whose wings are extended above them. The mantle of the one on the right falls over his right arm, and he holds the chains of a thurible with which he is censuring the departing spirit ; the other angel stands by as his assistant, to receive the soul as it leaves the body, and to carry it away to happiness. Below is a very different scene, viz., the pains of hell ordained for the wicked. A portion of this subject has been generally mistaken for a boat, to which indeed it bears a strong resemblance ; but, in reality, it represents a far different object, viz., the jaws of hell ; and on close examination it will be found that what

was supposed to be the notched edge of the boat is really the teeth of the jaws, nineteen in number, and then after a break four more. The outline of the whole head connected with these terrible jaws may be discerned in part upon the stones beneath, including the eye and ears. Within the dread confines thus suggested is seated a demon, with a monstrous head like a baboon, who grasps a fork with both hands, by the aid of which he is forcing a group of three condemned ones, who vainly cling to each other, headlong into the fiery depths below. Two of these wear tightly-fitting caps, elongated behind to the nape of the neck, but are otherwise stripped of all clothing, and the tines of the demon's fork are fixed in the jaw and cheek of the central figure.

11. Christ the Custodian of all Faithful Souls—(John x. 28, xviii. 9).—This subject is much mutilated, and has, I believe, been so far unnamed; it, however, undoubtedly represents our Lord as the guardian of faithful souls. Seated upon his throne, his long hair flows upon his shoulders, and the remains of a beard are discernible, but the face is entirely gone. His person is clothed in a tight-fitting robe, cut square at the neck with a vertical opening in the middle and a girdle round his waist. Below this the robe is fulled, and reaches to the feet. Over it is a mantle. The arms of Christ are extended, and He holds in his hand a pendent sheet, probably suggested by that seen by St. Peter in his vision (Acts x. 11). This contains three little *quasi* newly-born babes, intended, according to usual mediæval practice, to typify Christian souls.¹ At the four angles of this subject are remains of the Evangelistic symbols, portions of whose wings and other details may still be discerned on a close examination. The ground has been painted red, either to suggest the glory of heaven or simply for the purpose of throwing out the sculpture with greater distinctness. On the left hand above is the eagle of St. John, one of

¹ This conventional mode of typifying the place of beatified spirits in Abraham's Bosom, "*in Sinu*" (Luke xvi. v. 22), represented as the lap of the Patriarch, or as a drapery held by him over his knees, is familiar to us in monumental sculpture and sepulchral brasses, such a figure being often introduced over the head of the effigy. Peter Comestor, in *Hist. Scholast.* c. 87, states that the *limbus*

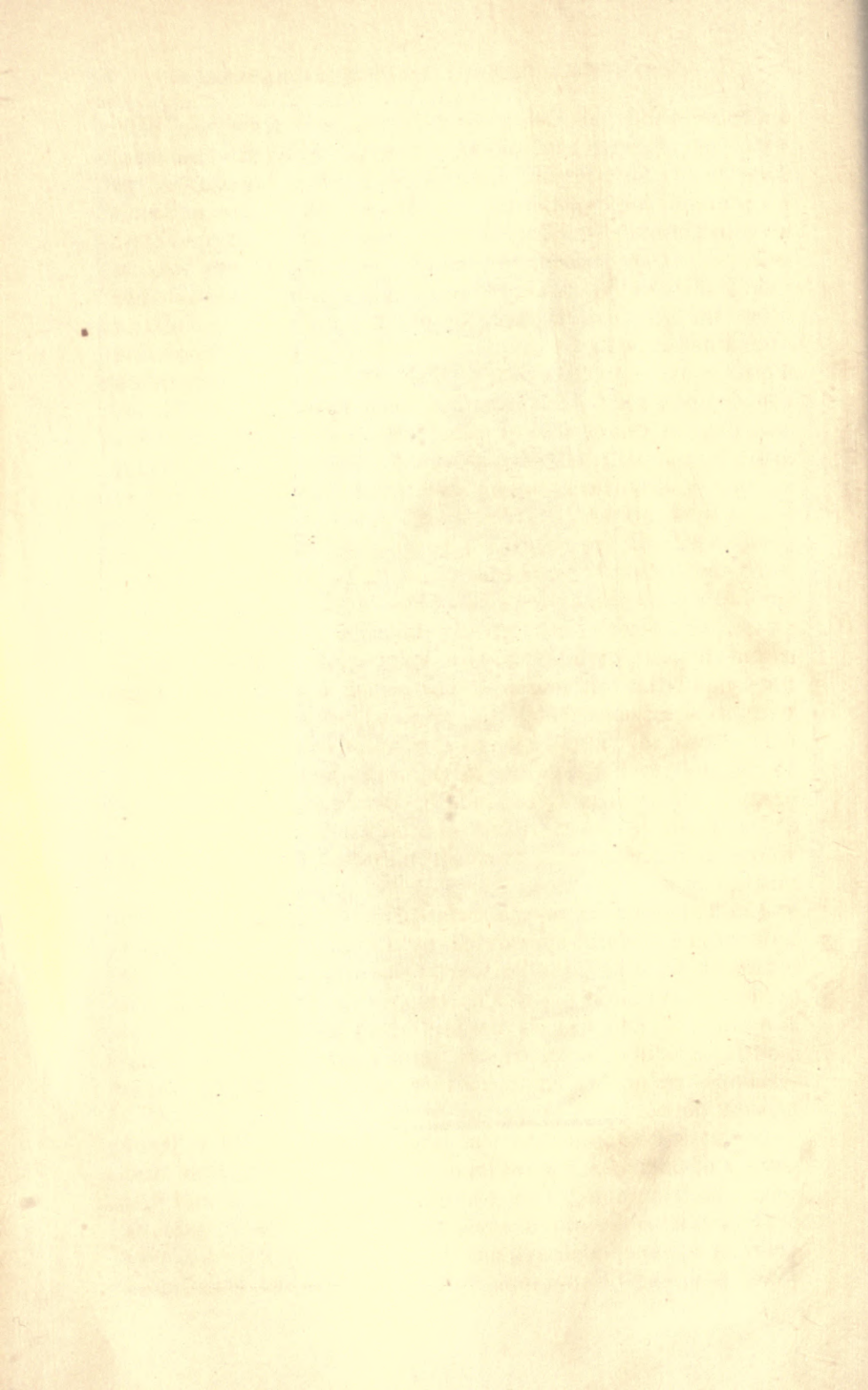
of the souls of the blessed in the future state was called "*Sinus Abrahæ*." See further in Ducange, *v. Limbus*. The representation of souls thus held in a drapery, usually described as Abraham's Bosom, occurs in early sculptures in the church of St. Trophimus, Arles, in painted glass at Bourges, and in other examples of mediæval art.

whose legs rests upon the Saviour's left hand, and whose feathering was very perfect until the late touching up of these sculptures ; opposite appears the angel of St. Matthew. Below the eagle the wing and head of the lion of St. Mark in part appears, and opposite to this we may conclude once appeared the ox of St. Luke, each having four wings.

12. The Torments of Hell—(Mark ix. 43, 44 ; Col. ii. 15 ; Heb. xii. 22, 23).—This subject, from its great importance, is not confined to one or more panels, but constitutes a considerable portion of the sculptured band. Part of it, 13 ft. in length, is placed over the northernmost recess of the west front of the Cathedral, and the remainder is carried on within the side wall of the larger adjoining recess. Over the whole is a continuous plainly-chamfered cornice, serving to protect it from the weather. The greater part of this subject, viz., all that faces the west, very vividly represents prophetically the torments of hell. The remainder depicts our Lord, as the victor over Satan, approaching the entrance or jaws of the place of eternal punishment, from which He is rescuing various suppliant souls, and behind Him are the saints redeemed by his blood, clothed in robes of righteousness, some of whom are sitting and some standing in close communion with their Lord and with one another. The torments of hell are set forth in a way best calculated to impress an uneducated people, who would more readily understand and be affected by the portrayal of bodily sufferings than by the greater pains of mental agony. This scene of misery is divided into four groups. The first, towards the left, represents two miserable human beings, stripped of their clothing, and delivered over to the power of a devil, who, with a wide monstrous face, stands between them. One of these is a man, the other a woman, with her hair flowing upon her shoulders. His right hand and her left are fastened to strong rings pendent above their heads, while their other hands are convulsively raised in excruciating pain, for their tormentor has stuck his sharp claws into the sides of his wretched victims, and two loathsome dragons, crossing one another below, represented as having small wings and long twining tails, with open mouths, are just about to close their jaws upon the thighs of the sufferers. The next group is much mutilated, but its original design is still evident. In this subject a devil of large size



UTING



and horrid form has seized two condemned men by the hair, which he is violently pulling upwards, while at the same time he is so claspings their persons with his legs as to preclude all hope of escape. Above and below are writhing serpents, ready to fasten on the limbs of these wretched captives. One of them, crouching through pain and fear, is vainly thrusting out his right arm in agony, and lays the other on his own breast: the other is grasping one of the attacking serpents by the neck. The third group represents a miserable man, unclothed, with the exception of some drapery about his neck, who has been seized by two devils, standing on either side of him; and as he thrusts forth his arms in terror, each of his wrists is seized by a writhing serpent, and a third, coiling itself round his legs, is about to fasten upon his vitals. The fourth group is a modern copy of the original subject, the general characteristics of which it has no doubt reproduced, although differing very considerably from the style of the older work, whose quaintness and originality it has utterly failed to reproduce. This group consists of a devil with large ears, and a tail curling round his left leg, who has seized a poor naked man with a short beard by the hair, while between this evil spirit and his victim a second man in vain interposes by trying to hold back his tormentor's hand. Below is a dragon, who, with open mouth, displaying a formidable set of teeth, is about to bite one of the suffering men, and whose voluminous tail twines round the left legs of his victims.

13. The entrance of the awful prison-house of condemned souls next appears, represented by a monstrous head, reaching from the top to the bottom of the sculptured band. The eyes are large and prominent, suggesting the idea that hell is seeking to enlarge its borders; and the vast size of the mouth, extended to its utmost limit, appears to point to the insatiable greed of Satan for more and more victims whom he may devour.

In close contiguity to the jaws of hell and the dread powers of darkness, stands the blessed Author of light and salvation triumphing over the devil, whose form, bound and prostrate, is represented beneath his feet. The Saviour's dress is a robe, confined round the waist by a girdle, over which is a long flowing mantle, a portion of which is gathered

up under his left arm, and another portion hangs over his right shoulder. His feet are bare, his hair depends in long tresses upon his shoulders, and as Lord of Heaven and Earth, a crown encircles his brow. The hands and face are gone, but the Saviour bends in anxious love towards seven souls issuing in eager haste from the portals of hell, with their hands clasped in prayer, and in eager hope of release from their dread prison-house, whilst, from his attitude, the Lord of Life and Death appears to be blessing them; and, according to an ancient patristic belief, to be releasing them from the torments of hell, whose prince, with his hands crossed and bound together with thongs, and his cloven feet secured by heavy fetters, lies beneath the triumphant feet of Christ, as described by Keble,—

“Thine eye controuls
The thronging band of souls ;
That, as thy blood won earth, thine agony
Might set the shadowy realm from sin and sorrow free.”

Next to the figure of our Lord is one whom we should naturally expect to represent St. Michael, because he stands upon the head of the prostrate Satan ; but as the head is not nimbed, nor the shoulders winged, this may be intended simply to represent Man triumphant through Christ, in accordance with the word of prophecy. This has suffered much from its exposed position at an angle of the band, but its posture indicates admiration at the Saviour's act, who, through His power of leading captivity captive, used that power, as some of the fathers thought, in releasing souls from the jaws of hell. This figure is draped in the same manner as that of Christ, but the left leg, protruded from the robe as far as the knee, is exposed. The right hand is raised in astonishment at the miracle in the act of performance, and the left is laid in thankfulness upon the bosom.²

This curious sculptured subject is especially valuable because it sets forth the opinion held by Remigius with respect to the doctrine of Christ's descent into hell ; for hence we gather that in common with Irenæus, Clemens

² Essex notices this remarkable sculpture as comparatively less rude in execution, “yet in design and treatment pre-eminently barbarous, &c., a subject, one would suppose, better suited to the

celebrated Gate of Dante, than to the entrance to a Christian church.” *Architecture and Sculpture of Lincoln Cathedral*, p. 16.



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CHICAGO, ILL., U.S.A.
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Single Copies, Fifteen Cents.
Entered as Second-Class Matter, May 2, 1917.
Postpaid.
Acceptance for mailing at special rate of postage provided for in
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Alexandrinus, Cyril, and other Fathers of the Church, he believed that Christ preached to lost spirits in hell; and, with Augustine, that through the efficacy of his precious sacrifice for man he released some, but not all, confined in hell, from its torments;³ and thus, "having spoiled principalities and powers, he made a show of them openly, triumphing over them."⁴ In the "Acts of Pilate" or "Gospel of Nicodemus," the result of our Lord's descent into hell is thus declared:—"Christ takes Adam by the hand, the rest of the Saints join hands, and they ascend with him to Paradise. Then Jesus stretched forth his hand, and said, 'Come to me, all ye my saints, who were created in mine image, who were condemned by the tree of the forbidden fruit, and by the devil and death; live now by the wood of my cross; the devil, the prince of this world, is overcome, and death is conquered.' Then presently all the Saints were joined together under the hand of the Most High God, and the Lord Jesus laid hold on Adam's hand, and said to him, 'Peace be to thee, and all thy righteous posterity which is mine.' Then Adam, casting himself at the feet of Jesus, addressed himself to him with tears in humble language and a loud voice, saying, 'I will extol thee, O Lord,' &c., &c. Then the Lord, stretching forth his hand, made the sign of the cross upon Adam and upon all his Saints. And taking hold of Adam by his right hand, he ascended from hell, and all the Saints of God followed him, &c., &c. Then the Lord, holding Adam by his hand, delivered him to Michael the Archangel, and he led them into Paradise, filled with mercy and glory."

Further matter connected with this subject is contained in the "*Traicté de Purgatoire*," 1545, and "*Traytte of good lyving and good deying, and of paynys of hel, and the paynys of purgatoyr*," &c., printed by Anthony Verard, 1490; both these are in Lincoln Cathedral Library, the last being a very curious volume with quaint woodcuts. But perhaps the character of the belief as to our Lord's descent into hell usually held by the Churchmen of the twelfth century is best gathered from a fine passage in one of St. Bruno's Homilies:—"Sciendum est autem quod illa hora, qua salvator noster inclinato capite spiritum emisit, corpore in cruce derelicto anima simul cum divinitate ad inferna spolianda

³ Epistle to Eudius, xcix. cap. 3.

⁴ Coll. ii. 15.

descendit, et tunc quidem illud psalmistæ adimpletum est : ‘Attollite portas principes vestras, et elevamini portæ æternales, et introibit Rex gloriæ!’ quibus interrogantibus, ‘Quid est iste Rex gloriæ?’ reponsum est eis, ‘Dominus fortis, et potens in prælio.’ Ingressus igitur dominus loca tenebrarum omnia circumquaque suo splendore illuminavit; fit clamor permixtus, bonis pro lætitia exultantibus, malis non præ timore fugere cupientibus. Tunc primi parentes occurrunt, et videntes creatorem suum lætis vocibus clamant, ‘Tandem Christe venis, magnis nos solvere pœnis.’ Tunc Patriarchæ et Prophetæ obviam ruunt, tunc omnis Sanctorum exercitus ejus pedibus se prosternunt. ‘O,’ inquit, ‘diu desiderate, O tanto tempore expectate, quæ te tantæ tenuere moræ?’ Tunc citharista David, ‘hoc est,’ inquit, ‘quod dicere solebam.’ Auditui meo dabis gaudium et lætitiā, et exultabunt ossa humiliata. Ecce nunc vident, ecce nunc audiunt, quod et videre et audire desiderasse Dominus ipse dicebat.’ Ait enim, ‘multi Prophetæ et Reges voluerunt videre quæ vos videtis, et non viderunt, et audire quæ auditis et non audierunt.’ Tunc Joannes Baptista, ‘Ecce,’ inquit, ‘de quo dicebam vobis, videtis illum, ejus adventum nuntiabam vobis.’ Sed qui per singula dicere audeat quanta ibi lætitia fuerit, cum Christus sol justitiæ eis apparuit? Tunc, alligato Diabolo, magno Sanctorum exercitu comitante, cum gloriâ et triumpho lætus Dominus ad superos rediit, dicens, ‘Quoniam non derelinques animam meam in inferno, nec dabis Sanctum tuum videre corruptionem. Notas mihi fecisti vias vitæ, adimplebis me lætitia cum vultu tuo; delectationes in dexterâ tuâ, mihi pater, ubi tecum sedeo et vivo, et regno in sæcula sæculorum. Amen.’”⁵

The subject of our Lord’s descent into hell continued to be treated by mediæval artists precisely in the same manner as it was in the sculptures at Lincoln, down to the sixteenth century, hell’s portal being represented as the widely-opened jaws of a monster’s head, from which human forms are emerging at the approach of Christ; and in one late example of Flemish work carved upon a wooden panel, now in Stow Langtoft Church, Suffolk, a devil is retiring, as if in disgust that his office of door-keeper has been superseded, with his key slung over his back.

⁵ S. Brunonis Astensis Signensium
Episcopi Opera. Venetiis apud Bertanos,

1651. S. Brunonis Astensis Homilia in
Dominica Sanctæ Paschæ, tom. 2, p. 69.

14. This consists of six figures of saints holding communion with each other, among which the orders of Prophets, Priests, and Kings appear to be represented. They are all invested with long ample robes, or marriage garments washed in the blood of the Lamb, and, in peaceful security near Christ, are conversing one with another. The first figure, from its exposed situation, is in a very mutilated state. It is in a standing position, and has no peculiar characteristics. The second figure is seated ; the left hand holds up a portion of the mantle, and the right is raised in front of the left shoulder. The third figure is standing with the legs crossed, the left hand raised to the shoulder, and the right hand below the girdle supporting a portion of the mantle. The fourth saint, turning away from the last, is apparently represented in earnest conversation with the personage carved upon the other side, next to whom he stands. His mantle flows over his right arm, and with his right hand he sustains a portion of it below. Another piece of it falls over his left shoulder, and his left arm is raised as if to enforce what he is saying. The fifth figure is possibly that of a bishop seated, his right arm being raised in the gesture of blessing, and in his left hand is a long pastoral staff. With some care the various episcopal vestments may be recognized, such as the pall, chasuble, stole, tunic, and dalmatic. Something has been carved upon the head, which we may presume was a low mitre, but its form is now utterly lost. This figure may have been intended for St. James, or simply to represent the episcopal order. The last figure stands with the legs awkwardly crossed. The right hand is raised towards the left shoulder, and some object is held with the left hand, perhaps a harp ; on the head appear to be remains of a crown. It is robed like the others, and the treatment of the drapery throughout this subject has evidently been copied from some classical model. This figure was possibly intended to represent the kingly order exemplified by David ; and, if others were originally crowned, for which there is some ground of belief, we may assume that these, as saints, were so represented as having assumed the crown of righteousness laid up for them during their life on earth.

NOTE.—The several subjects are placed in the following situations:—

1. The Expulsion of Adam and Eve from Paradise South face of the central recess.
2. The Curse of Man because of his Disobedience Between the central and southern recess.
3. The Building of the Ark Over the smaller southern recess.
4. The Effects of the Flood Within St. Hugh's chapel.
5. The Entry into and Departure from the Ark. God communes with Noah Over the smaller southern recess.
6. Hannah and the Infant Samuel; and Samuel announcing God's Revelation to Eli North face of the southern recess.
7. Daniel in the Lions' Den Over the smaller southern recess.
8. Christ instructing a Disciple South face of the southern recess.
9. Christ sitting at Meat with the Two Disciples at Emmaus South face of the northern recess.
10. The future Blessedness of the Righteous contrasted with the Torments of Lost Souls South face of the northern recess.
11. Christ Custodian of Faithful Souls.... North face of the northern recess.
12. The Torments of Hell }
13. Christ the Victor of Satan } ... Over the smaller northern recess.
14. The Happy Communion of Saints ... North face of the northern recess.



The Raising of Lazarus: Chichester Cathedral. See p. 2, ante.

THE ICENHILDE ROAD.

By the late JOSEPH BELDAM, Esq., F.S.A.

It is not the design of this memoir to enter upon a general discussion of the ancient roads of this kingdom, whether of British, Roman, Saxon, or Danish origin. Such a discussion would require an amount of leisure and of learning to which I make no pretension. The general subject, moreover, has already undergone the careful investigation of eminent archæologists, from the days of the Venerable Bede, down to our own times. Though it must be confessed, that notwithstanding the superior advantages, in some respects, possessed by the elder luminaries, they have left many points of great interest in a state of doubt and obscurity, which will now, probably, admit of no solution, unless from the diligent researches of the local antiquary.

It is with the hope of throwing a little additional light on questions connected with a portion of the two great roads—the Icenhilde and the Erming Street,—that I offer some results of recent personal investigation, with a few prefatory remarks of a more general character.

No practical explorer can have been long engaged in these interesting inquiries, without discovering proofs of the existence of numerous roads of ancient, though often uncertain, origin, which leave no doubt, however, that, besides those great military and commercial roads which we usually ascribe to British or Roman hands, a complete network of vicinal and inferior roads intersected many parts of the country, indicating an amount of population and a facility of inter-communication, which to many persons in the present day must appear somewhat surprising.

It is not always easy, however, to determine the class to which these roads belong. For, though the general characteristics of British and Roman roads are well known, many of them have undergone such changes from the lapse of time, the occupation of later races, or the encroachments of

modern cultivation, that the original marks and traces are often almost obliterated.

The original British roads, it need scarcely be observed, were little better than field tracks, hollow, unpaved, and straggling in their course, and chiefly designed, we may assume from the unfriendly relations usually subsisting between native tribes, for local accommodation ; while a few of them, possessing an international character, ran through different territories, and were used by various tribes, in peaceful times, for mutual purposes of intercourse and trade. As the earliest of these must have preceded the Roman occupation, their course was necessarily directed, originally, towards British and not Roman sites. They frequently exhibit a remarkable though not exclusive peculiarity of being accompanied by parallel or loop lines, suggestive of the precautions of warlike and barbarous races, ever watchful towards an enemy, and making preparation, either for surprise or for retreat, as the occasion might require.

The more solid construction and correct allineation of the Roman roads plainly indicate the labours of a more civilized and scientific people. At first they must have been intended almost entirely for military purposes, as approaches to military stations, and means of connecting military positions together, their main object being to facilitate conquest, and to secure the possession of territory already acquired. Thus they gradually advanced with the progress of armies, and multiplied with the extension of conquests, until military posts and military roads were established over a great part of the island. But as these posts were widely scattered, and often irregularly placed, following the exigencies of war, the roads which led to them frequently ran in zig-zag directions, and seldom afforded the most direct communication between places remote from each other. At a later period, when the Roman authority became more firmly established, and the military and social necessities of the provinces were better understood, we have ample proof from ancient authors that new roads were constructed and old British roads adopted and improved, in order to shorten distances and increase the general convenience. This process of improvement, indeed, commenced very early, and it certainly continued until the Romans finally quitted the island.

The Roman roads, thus left, continued, there is reason to

believe, to be generally used during the long and distracted ages of the Saxon Heptarchy, wherever the ravages of war had not occasioned their destruction, or the exigencies of newly founded and independent states did not require the formation of other roads towards fresh centres of industry and power. Of the events of this gloomy period we know comparatively little, but it cannot be doubted that, before its close, the names and even the existence of many Roman sites, and of the roads that led to them, had perished; while of those that remained, the greater part had fallen into a state of miserable dilapidation and decay.

Something more than a century after the re-union of the Saxon states into one monarchy, in the reign of King Edgar, we are told that there still existed in England four principal highways, which traversed the kingdom from north to south, and from east to west, and that these four roads were then placed under special royal protection. They were called the Fosse, the Watling Street, the Erming Street, and the Icenhilde Street. To some portions of the last of these attention will be more particularly directed. Dr. Guest, in an able discourse published in the *Archæological Journal* in 1857,¹ has taken great pains to trace the probable courses of these roads and the etymology of their names; Professor Babington, in his interesting work on the ancient roads of Cambridgeshire,² has also carefully examined so much of the same subject as fell within his province. Fully recognizing the general accuracy of these authors, with the exception of some points to which I may hereafter refer, I shall devote the present memoir to such results of my own observation along one of the two last mentioned roads, for the distance of about 20 or 30 miles from the town of Royston, as may tend, I trust, more fully to explain its origin and character.

Our present inquiry relates to the Icenhilde Road; and no question will now be raised respecting either its commencement or ultimate destination. It is generally admitted to have been an ancient British road, and one of the few which extended, through various territories, from one side of the

¹ The Four Roman Ways, *Arch. Journ.*, vol. xiv. p. 99, accompanied by a valuable map.

² Ancient Cambridgeshire, publica-

tions of the Cambridge Antiq. Soc., 8vo. series, No. III., by Charles C. Babington, M.A.: 1853.

island to the other. It appears to have commenced on the Norfolk coast, somewhere near Yarmouth, to have passed through the country of the Iceni to their capital at Ickleham; from thence by Ickleton, a small town on the borders of the Trinobantes, to Royston, where it was crossed by the Erming Street. It went on by Dunstable, near to which it was again crossed by the Watling Street; from thence it continued to follow the great chain of chalk hills which traverse the country in a south-westerly direction, throwing out parallel lines at different stages of its course; and, here and there, being checked or defended (especially in its eastern quarter) by dykes and fortified camps. In its further progress westward, it appears to have divided into several branches, visiting the druidical sites in Wiltshire and the mineral districts beyond, and, finally, to have terminated at some point or points, probably, on the coast of Cornwall. It will be requisite, in the present notices, to consider a variety of particulars falling within the allotted distance, but it may here be remarked of this road as a whole, that no stronger proof of its great antiquity can be well imagined than the fact of its being accompanied through the greater part of its course by numerous tumuli, of the earliest known construction, many of them (as I can attest by my own examination) belonging to the "stone period," and being anterior to the age of metals and cremation. Little doubt, indeed, can exist that this road must have been used by the earliest occupiers of the island, affording, as it does, natural advantages of an open passage across a country originally obstructed by dense woods on the one hand, and by difficult morasses on the other, over a dry soil and a verdant turf, supplying abundant nourishment for cattle, a ready access to the great centres of national superstition, and peculiar facilities for the interchange of commodities between the most distant tribes. The name by which this ancient road was first known is uncertain. Its present name is obviously Saxon, and we may take it for granted, on the authority of Dr. Guest, that in the earliest Saxon charters it was called the "Icenhilde Way." In evidences of the twelfth and thirteenth centuries, among the muniments of Royston Priory, I have observed that the name is spelt "Hickneld" or "Ykenilde" Street. But the earliest authorities are, of course, to be preferred; the name may, probably, have been

a translation of one still older, possibly, the "Via Iceniana." At all events it was considered by the Saxons as a military way. I shall presently offer reasons for concluding that it was ranked as such in Roman times; in fact, that it formed part of a military line of communication between several Roman stations. Our particular inquiries along this road, however, will be limited to the distance between Bournbridge and the neighbourhood of Dunstable. Between these points it pursued, for the most part, a midway course over a vast range of open downs, about four miles in width, parallel roads skirting it on either side, dykes or barriers of a uniform construction traversing it at intervals, and a chain of camps and forts, all of a similar construction, flanking it on the northern side.

Each of these subjects we shall take in succession, endeavouring, first, to fix the topography of the Icenhilde Street itself; next, to trace the parallel lines; thirdly, to explain the peculiarities of the dykes and northern camps; and, lastly, to deduce from the whole the probable frontiers of the adjoining British tribes.

I. The Icenhilde Road, on leaving Bournbridge, presently after crosses the Pampisford or Brent Ditch, at a point about half-way between the Pampisford End and Abingdon Park. It then follows the present boundary between Cambridgeshire and Essex for a short distance, runs about a mile to the north of the Chesterford camp, and, crossing the turnpike road from that place to Cambridge, goes along a parish road to Ickleton. There can be no doubt that this village was the site of a British town, possibly the first on the road to travellers from the west, but certainly so to those who came down from the Essex frontier. Camden calls the place "an ancient little city." From Ickleton the road runs within the Cambridgeshire border by Ickleton Grange, to Chrishall Grange, not far from a tumulus opened by the late Lord Braybrooke. But here, the Cambridgeshire boundary making a sudden turn to the north, the road passes onward for several miles over a narrow slip of Essex, the Heydon or Brand Ditch crossing it within that county, and presently rejoins the Cambridgeshire border near Known's Folly. It then continues to be the boundary line between Cambridgeshire and Hertfordshire for six or seven miles. From Known's Folly it passes over an outlying range of the downs

called Burlow's Hill, remarkable for a number of tumuli of the earliest construction, and reaches Royston, our central point. The antiquity of this site has been questioned by various writers. Dr. Guest, in his description of this road, being probably unaware of the local vestiges still extant, seems to consider it as merely a town of the twelfth century. The opinion of Dr. Stukeley was very different. He affirms it to have been a place of great resort among the Britons, and afterwards to have become a Roman town and station. This opinion, however correct it may be, seems to have rested mainly on the resemblance of the country to other celebrated British localities, and on the usual custom of the Romans to plant a station at the junction of great military roads. He does, indeed, point out some vestiges, and among them a narrow vale, lying to the south of the town, banked and ditched on either side, which he concludes to have been a British *cursus*. Mr. Nickolls carried the evidence of antiquity still further, by showing to the Society of Antiquaries, in 1744, a plan of a Roman camp at the distance of a quarter of a mile from the town, on the Baldock road.³ This plan is not now to be found, and if the distance has not been mistaken in the record, the camp must have been since obliterated, probably when the parish was enclosed. I shall offer a few results of my own researches in favour of the ancient occupation of the site, deriving my evidence chiefly from discoveries made under ground:—

1. I begin with the celebrated Royston Cave, which Stukeley erroneously describes as the handiwork and place of burial of the Lady Roesia, the supposed wife of Geoffrey Magnaville, Earl of Essex, in the twelfth century,⁴ but which, on closer examination, appears to have originally

³ Additions to Camden's Britannia, ed. Gough, 1806, vol. ii. p. 65.

⁴ This cave, situated under the market-place, in the chief street of Royston, had been dug in the solid chalk, and was approached by a shaft about 2 ft. in diameter, that had been closed by a millstone. The discovery occurred Aug. 1742, in fixing a post at that spot. Dr. Stukeley first published, in 1743, an account of this singular vault in his *Palæographia Britannica*, No. I, *Origines Roystonianæ*, which called forth a con-

troversial answer from Mr. Parkin, Rector of Oxburgh; Stukeley replied in the second part of his *Palæographia*; the discussion was prolonged by a rejoinder from his opponent in 1748. The vault is represented in Camden's *Brit.*, edit. Gough, 1806, vol. ii., p. 65. A fully detailed Memoir on the Cave of Roesia was communicated to the Society of Antiquaries by Mr. Beldam in 1852. *Proceedings*, vol. ii. p. 278. (*Ed. Arch. Journ.*)

been an ancient bone-shaft, enlarged by degrees to its present dimensions, the place of the lady's grave being nothing more than a continuation of the shaft below the floor of the oratory, and the bones and other refuse there, such as are usually found in these depositories. The upper part of this shaft was, no doubt, first shaped into a dome, and it bears almost unmistakeable evidence of having been designed for a Roman *columbarium*, the lower part being probably of a much later age, and, beyond all controversy, used as a subterranean chapel in the thirteenth and fourteenth centuries. But other bone-shafts (probably many) exist in the town, several of which have been partially opened, along the sides of the Icenhilde and Erming Streets. They all exhibit the same peculiarity of rude workmanship, the diameter extremely small, and footholds down the shafts on either side. One of these in a garden in the Erming Street, now called Kneesworth Street, I found to be of the depth of nearly 100 feet, terminating in a fine spring of water; but, like the others, it had been filled up, at some remote period, with the bones of a great variety of animals, some of them of species now extinct, mixed with ashes, charcoal, oyster, mussel, whelk, and snail shells in abundance, and other refuse usually found in the bone-shafts and dust-holes of Roman sites. In the same garden, and within a few yards of the well, were at the same time found, a few feet below the surface, several irregular floors of an ancient habitation, in all probability British; above which were fragments of a foundation of great strength and solidity. In another garden along the Icenhilde Street, now called Baldock Street, was found a circular cavern beneath a low mound, the floor being grooved in order to carry off water, and evidently designed as a rude habitation or a place of refuge.

2. Beyond the town, at the distance of a quarter of a mile to the west, on the heath, several British hut circles have been opened, containing ashes and fragments of bronze; and separated from these only by an ancient trench, which I shall have occasion to mention again, were at the same time discovered a number of narrow circular passages, cut deep into the chalk, and turning round a solid block, surmounted by a low mound, in the central chambers of which was deposited a perfect Romano-British vase, now in my possession.

3. In further proof of the antiquity of this site, may be mentioned the probability of a considerable neighbouring population, as suggested by the numerous tumuli on the surrounding hills, by the marks also of very extensive and remote cultivation, as shown by furrowed ridges in the turf, which are more especially visible under the slant rays of the setting sun. The abundance of Roman coins, moreover, scattered over these downs, furnishes an additional argument to the same effect; and one of these, a very perfect coin of Constantine junior, recently found in an ancient and exhausted clay pit, gives demonstration of the use made of that substance in the agricultural processes of the Romans.

4. Finally, I may add, though with greater uncertainty as to the period to which the evidence belongs, the recent discovery of an ancient cemetery, in levelling a mound and footpath by the side of the Erming Street Road, at the north entrance of the town. At this spot, and for an indefinite distance beyond, numerous shallow graves have been found a foot or two below the surface, cut into the chalk in regular rows, and indicating peaceful sepulture. Most of these graves contained skeletons which had not been apparently disturbed, the skulls resting in small cavities made for their reception, but with no weapons or other articles to indicate the date of their interment.

In the middle of the town of Royston, the Icenhilde Street crosses the Erming Street; at the distance of a mile and a half to the west, it is traversed by three ancient dykes, now almost obliterated, but still known as the Mile Ditches, which come down from a tumulus on the southern side, and run down to Bassingbourn Spring Head, a distance of about two miles on the northern side. A little beyond Odsey Grange, the road ceases to be the Cambridgeshire boundary, which turns abruptly to the north for several miles, while the road, still pursuing its original direction, crosses an irregular angle of the county of Hertford, till it reaches Baldock, a town of no antiquity, and thence proceeds to Wilbury Hill, the site of an ancient British camp, through which it passes, and goes down to Ickleford Ford, a considerable sheet of water formed by the junction of two branches of the river Hiz. Here it crosses, and proceeds a little to the south of Pirton, then ascends the lofty downs of Pegden Barns, near the beacon, approaches within about a

mile of Hexton or Ravensborough Castle, an ancient camp of formidable proportions and immense strength, and descends by Lilly Hoo Common into Bedfordshire. It there crosses the old Luton and Bedford road, and at the same spot also several ancient trenches called Gray's Dykes (similar in character to the Royston dykes), which come down in irregular lines of two ditches between three banks, from a tumulus on the Warden Hills, and disappear in a field on the opposite side of the road. They take the direction, however, towards Ravensborough Castle, and were, in all probability, connected, at some period, with that fortress. The Icenhilde Road from thence proceeds by Legrave, the source of the River Lea, and so onwards towards Dunstable, and the adjoining site of the ancient Magiovinium, where our present inquiry ends.

Throughout the whole of this distance there are very few traces visible of artificial construction ; the hard, chalky, and in some parts gravelly, nature of the soil, requiring little help. A considerable portion, however, is now converted into turnpike or parochial roads : where this is not the case, its original character of a narrow field track, between low banks and ditches, still remains. Only a small space between Baldock and Wilbury Camp has been broken up and planted. Along the entire route occasional tumuli are still to be seen ; but many more have been levelled within the memory of man, and scattered fragments of pottery over the hills indicate a much earlier and probably more extensive devastation.

The Roman use of this road will be better understood in connection with its parallel, and, probably, its principal substitute, the Ashwell Street ; but it is not wholly wanting in independent proofs to this effect. To some of these I have already referred in the neighbourhood of Royston. Along the line of hills from thence towards Baldock, earthworks and scattered coins afford the same evidence. At a spot called Slip End, near Odsey, within a few hundred yards of the road, a small Roman habitation was opened by the late Lord Braybrooke, and subsequently examined by myself, a short distance from which many Roman vestiges have been found, including urns and a large number of clay moulds of coins, chiefly of the family of Severus, some of which are now in my own possession. At Baldock, Roman

urns and other relics, at Wilbury Camp, a coin of the empress Faustina, and at Litchbury Springs, half a mile distant, a quantity of Samian and other Roman pottery have also been discovered.

II. We have now to consider the parallel roads, and 1st that on the Cambridgeshire side. Starting again from Bourn-bridge, where this parallel joins the Icenhilde Street, it took the line of the present turnpike road to Whittlesford Bridge, then only a ford, passing between the end of the Pampisford or Brent Dyke and the wet land on the opposite side. Proceeding thence for a short distance along the Royston turnpike road, it appears to have diverged to the north, crossing the Thriplow Heath (now enclosed), and near to several tumuli described by Lord Braybrooke. It then ran through or near to the village of Foulmire, and over fields now enclosed down to the springs on Melbourn Common, passing through a narrow opening between them and the northern end of the Heydon or Brand Ditch; from thence proceeding over Melbourn fields within half a mile of a Roman camp at the Cambridge end of Melbourn, and skirting the back of that village to the other end, it crossed the ancient road from Royston to Cambridge, and ran between a tumulus called Greenlow Hill and the copious springs of Melbourn Bury. It then went across the Meldreth and Kneesworth fields to Kneesworth Hedges, within sight of Mutlow or Metal Hill, situate half a mile to the north. At Kneesworth Hedges, where there is another fine spring, it crossed the Erming Street, then proceeded westward a little to the south of Bassingbourn and Bassingbourn Spring Head, being there traversed by the Royston Mile Ditches running down to that spot. It soon after entered the parish of Litlington, passing by the Litlington Sheen or spring head, which doubtless supplied the small Roman fort, now called Limlow Hill, half a mile to the south. Within a short distance of this it ran close by the celebrated Litlington Ustrinum, tumulus, and villa,⁵ and went on in a winding course towards Ashwell. The greater part of the way thus described may still be followed through parish roads and by-lanes, a small portion only being entirely effaced; but its irregularities have been occasionally rectified by the modern commissioner, and in such cases the crest of the old

⁵ *Archæologia*, vol. xxvi. p. 368.

road is often visible in parts which seemed to require additional elevation and solidity. At Ashwell the road passed close by the celebrated springs which give it its modern name, and from thence a short branch ran up to Arbury Banks, an ancient British camp of considerable magnitude standing on rising ground a little to the south, and then crossing the intervening country to the Icenhilde road. The Ashwell Street still went on westward by Stotfold and Hinxwell, crossed the road from Baldock to Sandy, and finally reached Shefford, beyond which it is not necessary to follow it. The original name of this ancient road is not known ; and its present name, acquired probably when Ashwell became a considerable Saxon borough, can only be applied with certainty to the space between Melbourn and Ashwell. But there can be no doubt of its British origin, nor of the purpose it answered in connecting together a number of villages standing on slips of firm ground between swamps which, at that remote time, were probably almost impassable, and thus closing the inlets into the Icenian territory beyond. To possess and secure these advantages were no doubt among the earliest measures adopted by the Romans in their efforts to subjugate that warlike British people ; and the great convenience afforded by the neighbouring springs appears to have given to this ancillary road a subsequent preference over the old Icenhilde road (though not to its exclusion) in the military communications between Roman forts and stations to the east and west. Along the whole of this route, indeed, the conquerors have left abundant tokens of their presence and activity. They permanently occupied the villages, they improved the road, they appropriated the British camps and strong posts along the line, they added defences of their own, and in every way manifested the importance they attached to this defensible frontier. In the remarks I may hereafter make on the probable boundaries of the British tribes, I shall have occasion to allude more particularly to the principal of these British strongholds, but at present I shall confine myself to the vestiges, whether British or Roman, which specially mark the course of the road. The most important of these is the Roman camp, already alluded to, at Melbourn. It formed a quadrangle of about 200 yards square, surrounded by a vallum, with a second vallum towards the east. It occupied a plot

of dry ground, defended towards the north-east and east by the morass. Under its western side passed the ancient road to Cambridge, still known in this part by the name of the "Portway," and a similar space of about 200 yards of high ground, probably entrenched, divided it from the Meldreth morass, still farther to the west. There can be little doubt that this was the principal access to Camboricum from the country of the Cassivellauni. Between the north-eastern vallum of this camp and the morass, a considerable deposit has been recently found, consisting of 16 or 17 funereal urns in a very perfect condition, which are now in the British Museum; a silver coin of Constantine has been also found in the camp. The village of Melbourn and its vicinity have been very productive of antiquities, and many coins, together with Samian, Castor, and other ware, may be mentioned among them. Along this line also British relics have been found, bronze and stone celts of great beauty; and at Greenlow Hill, several small British penannular iron rings, of the horse-shoe form. At Mutlow Hill, also, a stone coffin was sometime since discovered, containing a skeleton wrapped in lead, with coins and lachrymatories. Bassingbourn and its neighbourhood have been equally abundant in coins, bronze relics, and other antiquities. There is some ground for believing that a Roman camp once stood on the site of the fortified mansion of John of Gaunt, to the north of the village. It is at least certain that vestiges of several ancient roads may be traced from the Icenhilde Street towards that spot, and a bronze sword, either Roman or British, was found on one of them. A portion of the site itself also bears a strong resemblance to a Roman encampment, and bronze fibulæ and coins have been recently discovered very near it. It is needless to speak of the remarkable antiquities of Lillington, and the numerous coins that have been found there. A large proportion of these, however, have been unhappily dispersed, though some have been deposited in the Oxford and Cambridge Museums, and a few remain in my own possession. Limbury or Limlow Hill consists of a lofty tumulus enclosed within a square intrenchment. Many Roman coins, beside pottery and other antiquities, were discovered here and in the vicinity by the late Rev. W. Clack, whose collection was dispersed in Devonshire after his death.⁶ The tumuli in the

⁶ Ancient Cambridgeshire, by Professor Babington, *ut supra*, p. 37.

neighbourhood of Odsey and Ashwell have also yielded much pottery; the excavations made by myself in 1858, and recorded in the Proceedings of the Society of Antiquaries,⁷ have proved that the camp at Arbury Banks, though occupied by the Romans, was undoubtedly a British intrenchment. Various antiquities in pottery and glass have been also discovered in the vicinity of Stotfold and Hinxwell, but, as my personal inquiries extend no further, I need only advert generally to the valuable remains which Shefford has furnished to the Museum at Cambridge.

2. We turn now to the parallel road on the Essex and Hertfordshire side, which commences at Chesterford, and, throwing out various ancillary branches in its course, for the most part pursues a bold line of observation along the brow of the Essex and Hertfordshire hills, and ultimately appears to have divided into several routes communicating, probably, with Verulam and Magiovinium. The camp at Chesterford appears to have originally been a frontier town of the Trinobantes. A British camp is believed to have been there, and British coins have undoubtedly been found there; but we may infer, from the discovery of early imperial coins, that it soon became an important military position among the Romans. From this place a number of ways diverged towards the south and west; and among them were two which, coming up the hills to Strethall, formed a junction midway, and proceeded from thence by Elmdon, Heydon, and Chishill to Barley; while another road, coming round by Littlebury, Littlebury Green, and Chishill Hall, united with the former at Barley, which then proceeded up the Braughing or Hare Street Road southward as far as Barkway. At the entrance to this town it turned again abruptly to the west, following the brow of the hills along a raised road, still known by the name of the Causeway, the crest of which is visible by the side of the modern highway. It passed close under a wood, known as the Rookey or Rockley Wood, but lately cut down, and by an ancient chalk pit, to which further attention will be required in discussing the antiquity of the Erming Street, which it joined at Reed-mill Hill. Then going directly up this road for a short distance southward, it turned again at right angles down a parish road to Dane End, went for-

⁷ Proceedings of the Society of Antiquaries, vol. iv. p. 285, where a plan of the camp is given.

ward through Therfield, and along the same lofty ridge of hills as far as Kelshall by a road still called the Ridgeway. Another and shorter track, however, appears to have crossed midway over the northern slope of these hills from Barley, to join the Ridgeway at Therfield. It then probably passed through the village of Kelshall, and went down a lane by the church to Sandon ; from whence it proceeded to Red Hill, and so on to Wallington and Clothall. A branch probably descended from thence in the line of the modern road, to join the Icenhilde road at Baldock, which it probably followed through Hitchin and Offley towards Dunstable, while other branches on the higher ground may be presumed to have run through Wymondley and Stevenage towards Verulam. A large portion of this road commands magnificent views to the west and north-east over the country of the Iceni. It is still, as anciently, a wooded district ; and, when defended by fastnesses and guarded approaches, must have constituted a formidable frontier.

The antiquity of much of this line is supported by evidence, showing its occupation and use in British and Roman times. In the road, for instance, from Chesterford to Stretthall, which is undoubtedly British, gold torques of great value have been found. Also at Elmdon, and in the neighbouring villages of Lofts and Barley, abundance of bronze celts, Roman pottery, and likewise coins ; and the road coming up from Littlebury exhibits decided traces of Roman construction. In a high wood at Catmere End, adjoining Strethall, there is a lofty vallum and ditch, which, though probably forming part of a mediæval residence, bears strong indications of an earlier occupation by the Romans. Close by the Causeway from Barkway to Reed End, which united the Hare Street and Erming Street roads,—in the ancient chalk pit already mentioned,—were found, in 1743, the bronze statuette of Mars and the silver plates, probably forming parts of military standards, presented by Lord Selsey to the British Museum. A short and straight road ran up from this spot towards a square area, enclosed with a low bank and ditch, in the centre of which stood a mediæval mansion, surrounded by moats and ditches now recently levelled, but which very probably occupied a Roman site. On the most conspicuous part of the hill at Therfield, in a field called Tothills, there are very extensive earth-works,

the remains, no doubt, of a great mediæval mansion ; but its commanding position creates a strong probability of its having originally been the site of a Roman camp. Roman coins, both silver and copper, and of early reigns, are not unfrequently found in this village ; and immediately below it, on the downs, stood an ancient tumulus, described in the Proceedings of the Society of Antiquaries,^s from which were dug up, some years ago, several beautiful British vases, with ingots of hammered copper and other remarkable remains now in my own possession. On the Bury Leys at Sandon, a lofty hill overlooking the down, vast numbers of Roman coins have been found with several British coins, one of them of an unique type, and the appearance of the soil shows marks of very extensive combustion. This was probably a British *oppidum*, subsequently occupied by the Romans, and ultimately destroyed by fire. Still further westward, at Red Hill, a small Roman cemetery was discovered not long ago, as indicated by a number of funereal vases, and several silver coins of an early date. Beyond this spot my researches have not proceeded.

III. The Dykes or Ditches which cross the Icenhilde road, and their peculiarities, will next occupy our attention. My object will be to show that these dykes, in connection with other strong works, formed a series of defences for a people always occupying positions to the east ; and the peculiarity which attaches to all of them (with one doubtful exception) is that their strongest face is always towards the west, indicating the quarter from whence the chief danger was apprehended. The two first and principal of these are the "Devil's Dyke" and the, "Fleam" or "Balsham Dyke," but they lie beyond the limits assigned to this memoir, and have been often described. It will suffice therefore to observe, that in both the vallum is to the east and the ditch to the west. Their antiquity cannot be exactly ascertained ; but, as forming part of a general system of defence, their British origin may, I think, be fairly presumed. It is certain that they existed before the time of Canute ; and judging from the name of the second, the "Balsham Dyke" (which probably has some relation to the custom of cremation), it may be inferred to have existed before the adoption of Christian rites of burial. Both these dykes stretched

^s Vol. i. second series, p. 306.

across an open country, from the Cambridgeshire low grounds to the Essex woodlands, and both traversed the Icenhilde Street.

1. The Pampisford or Bran Ditch is the first barrier within our limits: its purpose was evidently the same. It runs from the wet ground at Pampisford over the open tract to the Essex woods at Abingdon Park. The branch road, known further west as the Ashwell Street, passed between it and the Pampisford morass, and the Icenhilde road crossed it about midway, in the line of the Chesterford and Newmarket Road; but the priority in point of age between the road and the dyke has not been definitively ascertained, though perhaps it may be inferred from discoveries recently made in connection with two of the other dykes shortly to be mentioned. After a careful examination of this dyke, I am unable to say whether it had any vallum, but certainly there was none that would offer any defence, supposing the ground to be unchanged. The earth appears to me to have been thrown up almost equally on both sides, though possibly the elevation on the western side is slightly the greatest.

2. The Heydon or Brand Ditch, our second barrier, commenced at the beautiful springs on Melbourn Common, and extended across the open country to Heydon, a distance of about four miles. The vallum, which was lofty, is on the eastern side, and the ditch, which was deep and wide, is on the western. Within a recent period, however, the vallum has been nearly levelled, and the ditch filled in as far as Heydon Grange, from whence, to its termination on Heydon Hill, the ditch has also been filled in, but the vallum is only partially lowered, so as to make a double causeway from the village to the farm. The actual dimensions of this great work cannot be exactly given, but I judge from stepping it, that the entire width from the western edge of the ditch to the eastern edge of the vallum, must have been at least 80 ft., and I infer, from some small remaining portions of the crest, that its altitude was probably 7 ft. above the ground level. Near to Heydon Grange it traverses the Icenhilde Road; and here, with a view to ascertain which of the two is the older, by the permission of the tenant, I ran a trench across the road, as near as possible to the point of junction, and where (if any) the ditch must have been; I found a solid and undisturbed bottom at the depth of about 2 ft. 6in.,

from which the inference seems certain that the road existed before the dyke, and the oblique direction in which the dyke traverses the road seems to confirm this conclusion. Close upon the Cambridgeshire border, the dyke is again traversed by a road running from Whittlesford bridge to Royston; and if this were an ancient track, as there is reason to believe, another opening must have always existed here—a conclusion rendered more probable by the fact, that at this point the natural drainage of the Barley Hills comes down, in its way to Foulmire, and must have always had a passage through, unless an overflow of waters here were designed to give additional protection to the dyke. A third gap occurs in this dyke, nearer Foulmire, to make way for the Braughing and Cambridge Road, which Dr. Stukeley and other antiquaries, with great probability, believed to have been Roman, though, of course, of a much later date than the dyke. After many inquiries, I have heard of no antiquities discovered in levelling this dyke, except a few bones in the vicinity of Heydon Grange. There is a vulgar tradition, however, that the Heydon people came down to the Melbourn Springs to fetch water, but water is now sufficiently abundant at Heydon. The only antiquity near it is a subterranean cell or chamber, described by the late Lord Braybrooke as having been found at the Heydon end, and which contained ashes, bones, some articles of bronze, and a coin of the emperor Constantine. But this excavation appears to me to have had no certain relation to the dyke, and the contents only show that it was open about the age of that emperor, though it might have existed long before. Dr. Guest has concluded that the Heydon Ditch probably formed the western *limes* of the Iceni. But their territory is believed to have stretched to the north of the Cassivellauni; and though the line of division east and west, between these states, probably descended from the Essex Hills to the borders of Cambridgeshire, somewhere near this dyke, I shall endeavour to show that the principal western boundary of the Iceni must have been much further to the westward.

3. The third barrier across the Icenhilde Road, within our allotted range, is found on Royston Heath, about a mile and a half from the town, on the Baldock Road. It consisted of three ditches, very rudely cut between four banks, which commenced from a tumulus on the heath, a quarter of a mile

to the south, and went straggling down to the Bassingbourn Spring-head, a distance of about two miles and a half, crossing the Icenhilde Road, over a gentle ascent coming up from the west, which gave additional protection to that side. The entire width of the banks and intervening ditches was about 100 ft. ; the width of the banks and ditches respectively, though not quite uniform, was about 13 ft. ; the depth of the ditches below the surface about 5 ft., and the elevation of the banks above the surface about the same. Though no doubt used for procuring water, their main object must have been to stop the intervening country. On the Bassingbourne side of the road, they have wholly disappeared among the modern enclosures, but they are well remembered, and my neighbour, the late Dr. Webb, Master of Clare Hall, accurately described their course to me before I had commenced my own investigations. The tumulus on the heath was evidently the key to these defences. Immediately behind it was a British habitation cut deep into the chalk, and consisting of two chambers—one of a lozenge, the other of a semi-lunar celt-like shape, united by a very narrow passage ; some of the articles found in it make it probable that it was open in Saxon times. On a loftier elevation behind it, called the Beacon Hill, are evident traces of military works, apparently of the Roman period : a deep vale, in the immediate vicinity, exhibits a series of small enclosures known by the name of the Hopscotch, and no doubt of British origin ; and in a grave on the hill above, have been recently found a flint arrow-head with other contemporaneous vestiges. The approaches to all these spots have abounded in silver and other coins, some of them in high preservation, and being of the early imperial reigns ; and at the opposite terminus of these ditches, near the springs, I have found British pottery, burnt flints, stag's horns, and other vestiges of the same period. The main question to be solved was, whether these barriers or the road passing through them were the oldest, and to this I am now able to give a definite answer. As a trustee of the old Icenhilde Road (now the Baldock Turnpike Road), I have recently ordered the spot to be examined, and ascertained that the ditches terminate on either side of the road, leaving a space of solid chalk of about 16 or 18 ft. in width, over which the ancient road undoubtedly passed, and proving therefore the priority of the road to the ditches.

4. The last of these dykes which it will be my duty to mention, are those now known as the Gray's Dykes, and which cross the Icenhilde Road between Lilly Hoo and Dunstable. These dykes, which strongly resemble the Royston Dykes in character and construction, consist of two trenches between three steep banks; they come straggling down from a tumulus on the Warden Hills, a little to the south of the Icenhilde Road, and traverse that road exactly at its point of junction with the old Luton and Bedford Road, taking the direction of the lofty hills and camp of Hexton, about a mile and a half distant, but now disappearing in the cultivated fields just beyond the road. The purpose of defending the open space between these two elevated positions cannot, I think, be doubted.

Various opinions have been entertained respecting the origin of this succession of dykes. By some they have been considered of British, by others, of Saxon or Danish construction. The description that I have given will probably lead to the conclusion that most of them existed in Roman times, and some, at least, at an earlier period. Their position and uniformity of construction show them to have been designed to protect a people against enemies approaching from the west; and, in this view, they have been ascribed by some persons to the East Angles, as works of defence in their gradual advances into the interior. But several of these dykes must have been long anterior to the East Anglian invasion; while the supposition of their Saxon origin lacks also the corroborative evidence of an earlier date, afforded by the co-existence of a chain of British camps and Roman forts in evident connexion with them. Regarding them, therefore, as forming together one system of defence for the same people, I can imagine no people so likely to have constructed them as the Iceni, as a protection in the first instance, probably, against the encroachments of other native tribes, and ultimately against the Romans during their last great struggle for independence. It is not the less likely, and indeed it may be considered certain, that both Saxons and Danes did afterwards employ them for their own military ends; and, as regards the last of these dykes, the Gray's Dykes, which seem to have formed part of the treaty line between Alfred and Guthrum, it appears to me highly

probable that this ancient and long recognised boundary was purposely selected on that occasion.

It remains only, under this division of our subject, to mention, somewhat more particularly, the British camps which flanked the northern side of the Icenhilde Road and completed the defensive frontier. Of these strong places, there are four within our allotted survey—namely, the camp called Vandle Bury on the Gog Magog Hills; the camp called Arbury Banks, near Ashwell; the camp at Wilbury Hill, near Ickleford; and the camp at Hexton, known by its Danish name of Ravensborough. With the exception of the Wilbury Hill camp, through the midst of which the Icenhilde Road passes, each of these camps stands at the distance of about one and a half or two miles to the north of that road, and the principal defences, I believe, in each case, are to be found facing the south and the west. 1. Vandle Bury, a well-known British camp—but (as the coins found there attest) early occupied by the Romans—crowns a lofty hill which slopes down towards the south and west, and thus affords additional security to those quarters. 2. Arbury Banks was originally a British camp, as proved by my own investigations reported in the *Proceedings of the Society of Antiquaries*,⁹ but not less certainly occupied at a later period by the Romans, in connection with the Ashwell Street. Its strongest side was towards the south, where the ground rapidly descends from the rampart, and it appears to have had a double ditch towards the west, while the springs which supplied it, rise towards the north and the east. 3. Wilbury Camp was undoubtedly of British origin, though subsequently used by the Romans. Its strongest ramparts faced the south and the west, while its defences towards the east, if any, must have been very slight. 4. Hexton or Ravensborough Camp, in all probability a British fortress, and of the most formidable dimensions, resembling in form and extent the Arbury Banks. It stands in the midst of lofty and precipitous hills, encompassed on its southern and western sides by deep and almost impassable ravines; while the approach from the east was comparatively easy, and its supplies of water were obtained from that quarter. Its position and prodigious strength point it out as a frontier fortress, a character which it must have maintained while in

⁹ *Proceedings Soc. Ant.*, vol. iv. p. 285.

Danish occupation ; it may, perhaps, be deemed a confirmation of its having been the terminal fortress of the Iceni in this direction, that the next British fortress along the Icenhilde Road, at "Magiovinium," appears to have reversed the rule of protection, leaving the south and south-west quarters comparatively exposed, and presenting its strongest front towards the north and the east. It seems to me a fair argument from the unity of purpose discernible in this series of dykes and camps, that they mark and protect a continued and common frontier.

Before quitting the subject of dykes, however, it will be proper to state, that in addition to these external defences, traces of two other dykes were observed by Dr. Mason a century ago, extending between Whittlesford and Foxton, and likewise between Foulmire and Newton, which more completely secured the interior in that quarter.

IV. We have lastly to consider the question of boundaries between the three great British nations who occupied this part of the Island, namely, the Trinobantes, the Cassivellauni,¹ and the Iceni. On this subject, it must be confessed, the information derived from ancient historians is scanty and obscure. Almost all that we gather is, that the Cassivellauni inhabited a district deemed to have extended over the greatest part of the counties of Hertford, Buckingham, and perhaps Bedford ; that the Dobuni were a subject people, stretching to the west of them as far as Gloucestershire ; that the Trinobantes inhabited, at least at one time, the counties of Essex and Middlesex ; and that the Iceni occupied territories lying more or less to the north of both these states, certainly comprising the counties of Norfolk, Suffolk, Cambridge, and probably a large portion, if not the whole, of Bedford and Huntingdon. The difficulty will be to fix the exact line of demarcation between them. It must be borne in mind that the outline of counties affords no certain criterion of these ancient limits. Counties themselves are divisions of a comparatively modern origin, and their actual configuration has grown out of arbitrary and accidental circumstances. These ancient limits, therefore, may be oftener found in the natural features of the country—in hills, woods, rivers, marshes, mounds, and other distinguishing objects, having been always more easily recognised, and

¹ See the note at the close of the memoir.

consequently less likely to occasion contention. Now, applying this rule, if we look at the extremely irregular and broken outline of the present Essex boundary between Chesterford and Known's Folly, which, moreover, has no distinguishing feature, it seems obvious that it cannot represent the ancient boundary between the Trinobantes and the Iceni in this quarter, and, adopting the presumption that the dykes which stretch across this open country must have been the work of one and the same people, and that people, the Iceni, for whose protection alone they could have had any value, we are driven to the conclusion that, territorially, the whole of these downs belonged to them, though, very probably in peaceful times, the rights of pasturage and occupation might be shared with their neighbours. In this case, the actual frontier of the Trinobantes must have been the brow of the Essex Hills, while the villages and marshes at the foot of the downs became the defensible frontier of the Iceni.

In endeavouring to ascertain the boundary between the Cassivellauni and the Iceni, we begin with the short line which separated them east and west, and which in all probability was identical, or nearly so, with the present Hertfordshire border, descending from the hills near Barley to a point to be afterwards noticed, a little to the south of Known's Folly. But the boundary line between these two states north and south is not so easily determined. The present division line between Hertfordshire and Cambridgeshire, from Known's Folly to Odsey Grange, is the middle of the Icenhilde Road, but this could not have been the line of separation between the two ancient states. As a probable means of deciding where it ran, we must again have recourse to our theory of the dykes, and conclude, that the territory of the Iceni in this part must have extended to the south of the Icenhilde Road, at least as far as the southern terminus of the Mile Ditches on Royston Heath. This opinion is, in fact, confirmed by the existence of an ancient trench which runs eastward from this point, over the brow of the lowest range of hills, towards the spot already indicated as being a little to the south of Known's Folly, being further distinguished by a line of tumuli along the whole distance. Traces of this ancient trench are still visible, and very distinct, for more than a mile over the heath to the west of

the town of Royston. In its construction it altogether resembles the Mile Ditches. The average width of ditch and bank is about 20 ft. ; the depth of the ditch and the elevation of the bank were, probably, together about 10 ft., the bank being on the northern side or that of the Icenii. Such a trench could have been of little avail for the purpose of defence, but it was well adapted for a boundary line. It has no known relation whatever to any parochial or other local division, and can be accounted for only as being a line of demarcation between two ancient states, a conclusion which seems additionally confirmed by the appearance of numerous cuttings and scarpings, and other evidences of defence, which mark the combs or valleys ascending from this level towards the high country. Beyond the point, at Odsey Grange, where the Icenhilde Road ceases to divide the county, the line of separation between the ancient states becomes more difficult, and must be somewhat conjectural. Yet finding it almost impossible to admit, in contradiction of the continued system of defence apparently accompanying the Icenhilde Road as far as the Gray's Dykes, that the present outlying and dislocated portions of the county of Hertford to the north of that road ever really formed part of the territory of the Cassivellauni, I am brought to the conclusion, that the true line of division throughout the whole of that distance must have run a little to the south of the Icenhilde Road. And once more adopting the extent of the dykes to the south of that road as the criterion, we have two certain points to assist our inquiry, namely, the tumulus on Royston Heath forming the southern terminus of the Mile Ditches on the east, and the tumulus on the Warden Hills forming the southern terminus of the Gray's Dykes on the west ; a line drawn from one to the other of these two points would probably, with tolerable accuracy, define the actual boundary. This line appears to me to have passed over the lowest range of hills, forming the sight horizon from the road, from the Mile Ditches towards Baldock, and from thence, nearly following the present turnpike, pursuing its course by Letchworth to Hitchin, and from Hitchin by Offley, over the Lilley Hoo Downs to the tumulus on the Warden Hills.

To recapitulate the evidence in favour of this extension of the Icenian boundary, we have, 1st, the series of dykes ;

2ndly, the corresponding chain of British forts ; 3rdly, the strong probability that the territory of the Iceni to the north of the Cassivellauni extended much farther than Odsey Grange, and included at least the passage across the river at Ickleford ; 4thly, the additional probability that the western frontier of the Iceni, of the East Angles, and of the Danes, being all determined in great measure by the configuration of the country, were nearly if not quite identical.

On this presumption, I am disposed to think that the territory of the Iceni, westward, probably commenced, like that of the Danes, somewhere near the source of the River Lea, and from thence proceeded northward, either along the line afterwards adopted by Alfred and Guthrum, to Bedford, and thence again eastward, along the River Ouse towards Huntingdon, or else that it ascended a branch stream of the River Ivel, passing by Shefford to the main stream of the Ivel, leaving the great British fortress at Sandy to the east, joining the Ouse, afterwards pursuing the course of that river to Huntingdon, thence by the Bullock Road or some other route to Peterborough, and so either by the old River Nen, or some other outlet to the German Ocean. To set against this conclusion, I can see nothing which appears to clash either with ancient or modern authority, except the position of the British fortress at "Sandy." And even that objection seems to be far more apparent than real. It is true that this ancient site has been identified by some eminent writers with the Roman station of "Salenæ ;" the principal reasons for this allocation being, that this station is placed by Ptolemy within the territories of the Cassivellauni, and that certain fanciful authors have been induced to derive the modern name of the place from that ancient appellation. But, in the first place, the Saxon name of "Sandy" never could have been a derivation from the Roman "Salenæ," which must surely have signified a spot famous either for its salt works or its medicinal springs ; and even supposing its position to have been correctly assigned by Ptolemy to the territory of the Cassivellauni, we are justified by the same author to conclude, that it stood much farther to the west, within the territories of the Dobuni, who, being a subject people to the Cassivellauni, might in so general a description be naturally identified with them, and one of their principal towns be consequently included.

At all events, it would be extremely difficult to believe that this fortress, whatever its name, belonged to the Cassivellauni. It stands on the eastern bank of the Iwell, within a couple of miles of the Cambridgeshire border, and must have been designed, like all camps and defences of the Iceni, to protect a people inhabiting a territory to the east and not to the west. For such a purpose this fortress occupied a site of great importance, while it would seem comparatively useless for any other; and the many vestiges of Roman occupation along the whole of this supposed western frontier of the Iceni, appear to confirm the narrative of Tacitus, that much of the brunt of war fell upon the rivers, and that the greatest efforts were made by the conquerors in every quarter to subdue this "*valida gens*," and effectually to crush any future attempt to regain their liberty.

Within a few days after the foregoing memoir had been read, at one of the Monthly Meetings of the Institute, the painful intelligence was received of the sudden decease of the author, one of our earliest and cordial supporters. Whilst deeply regretting that this his last communication should be published without the advantage of his own revision in passing through the press, we feel persuaded that these latest archæological labours of our lamented friend cannot fail to be received with no slight measure of interest. The memoir will be found to comprise the results of many years of personal and indefatigable research in a district replete with remarkable vestiges, and in which he was long a resident. Had his life been spared he might possibly, through the publicity given to his observations submitted to our Society, have been disposed to reconsider certain conclusions which, as he was aware, were not wholly in accordance with those of other antiquaries who have devoted attention to the subject. We may particularly advert to the name invariably given by him to an important tribe, usually called by other writers *Catuellani*, or *Catyeuchlani*, possibly the *Cassii* of Cæsar. There are difficult questions in connexion with their history, and as Mr. Beldam has invariably designated them *Cassivellauni*, for which unhappily we can no longer ascertain the grounds of his conclusions, it has been thought better to retain the name as written by himself.

ANCIENT REMAINS FOUND IN THE ISLE OF PORTLAND.

From Notices and Drawings Communicated by Professor JAMES BUCKMAN, F.R.G.S.

UNTIL recent observations, there was a belief that the Isle of Portland contained scarcely any evidence of Roman occupation. It had been supposed, however, by some antiquaries that Portland may be the *Vindilis* of the Itinerary. In the treatise attributed to Richard of Cirencester, the promontory *Vindelia* is mentioned as part of the territory of the Durotriges, and *Vindilios* occurs as one of the islands adjacent to Britain. In the map, also, sent to Stukeley by Bertram, Portland appears as "*Vindelil prom.;*" at a short distance from the coast is also seen the unknown island "*Vindelia.*" Baxter had proposed to identify the *Vindilis*, or *Vindelil*, of Antonine's Itinerary as Portland, suggesting *Vindenil* as a more correct reading, namely:—" *Vind enis, portuosa insula.*" Gloss. Ant. Brit., p. 251. It is scarcely needful to observe, that the questionable authenticity of the so-called description of Britain by the monk of Westminster is now generally recognised. Mr. C. Warne, long known as a sagacious investigator of the antiquities of Dorset, marks Portland "*(Vindelia)*" amongst Roman sites, in his recently published map showing the Celtic, Roman, Saxon, and Danish vestiges in that county. In the Index, also, which accompanies that valuable chart of early remains, he includes Portland with the places where Roman relics have occurred.

The works connected with the defences now in progress at Portland have revealed many Roman relics; there seems, indeed, to be some ground for the conclusion that the site now occupied in the construction of the Verne Fort had been part of a Roman entrenched work, subsequently so far destroyed by quarrying that its form and exact position can with difficulty be traced. This ancient work, it must be observed, seems to have been regarded as Danish by the Dorset Antiquary whose works are above cited, and who has carefully examined the numerous earthworks and strongholds in the county. The position of the Verne Fort

would, in former times, even more than at present, have marked it as of importance in the line of Dorsetshire fortifications. In the course of excavations for the foundations of the Verne Fort, a burial-ground was found; the graves were mostly wrought with slabs placed edgeways, so as to form cists of sufficient size to enclose a human corpse; these depositories seem to have been either covered by a large slab, or filled in with earth. The position in which the interments had been placed was, for the most part, east and west, in some instances, however, in the contrary direction. The graves contained, not unfrequently, pottery, fibulæ, rings, and other relics of the Roman period. Many of these objects were exhibited in the Temporary Museum of the Institute, at the Dorchester meeting in 1865.

Through the kindness of Capt. Tyler, R.E., and of Capt. Mainguy, R.E., I was permitted to examine numerous antiquities of early British and Roman character that they had carefully preserved, and to make sketches of those relics. Representations of some of the most interesting objects found at various periods accompany the present notice.¹

1. A celt of white flint, found at the Verne Fort; a portion of the broad or cutting end had been broken off; the implement, in its present imperfect state, measures $6\frac{1}{2}$ inches in length, the breadth at the widest part is about 2 inches. The smaller end is more pointed and carefully formed than is commonly the case in objects of this description. Compare Kemble's *Horæ Ferales*, pl. 11, fig. 5; the specimen there given by Mr. Franks is preserved in the British Museum; it was found in Shetland.

2. A rudely-shaped ball of dark-coloured chert, likewise from the Verne Fort. Diameter 3 inches. Similar balls, but of true flint, are not uncommonly found in Dorset.² Objects of this description, formed of flint, grit, or sandstone, or other compact material, more or less spherical, being occasionally

¹ A short account of discoveries at Portland has been given, *Arch. Journ.*, vol. xxiii. p. 75.

² Mr. C. Warne exhibited at the Meeting of the Society of Antiquaries, May 7, 1863, a stone hammer-head and a flint ball, both found in Dorset. The former was the only specimen found in a barrow in that county which had come under his

notice. The ball was supposed to have been used in fashioning flint implements; it was similar to those found in the Lake dwellings in Switzerland, and used, as supposed, for that purpose. *Proceedings Soc. Ant.*, vol. ii, second series, p. 265. Several Irish specimens are in the British Museum.

flattened on two opposite sides, like an orange, and having, in some instances, a slight depression or cavity on these flattened surfaces, have occurred in various parts of England. The purpose for which they may have been intended has not been satisfactorily ascertained. Some antiquaries have considered them to be missiles, thrown either by a hand-sling or by some engine like the *balista*; such a stone may, moreover, have formed a formidable weapon, if adjusted as a "slung-shot."³ It has also been supposed that these spherical stones may have served in pounding grain, or the like. It may deserve notice that they occur frequently on the sites of Pfahlbauten, the Lake-dwellings constructed on piles by a very ancient race in Switzerland. The examples there found, mostly of sandstone, and having their surfaces more smoothly dressed than in the specimen from the Isle of Portland, to which they are similar in size, have been described as "cornercrushers,"⁴

There is reason to suppose that weapons and implements of flint were made in the Isle of Portland, and, indeed, throughout a great part of Dorset. In the island and elsewhere have been found flakes of flint, and also cores or *nuclei*, from which flakes have been struck off, indicating sites where flint workings had been carried on. I picked up on the Nothe, the promontory adjacent to Weymouth, fragments sufficiently well-shaped to have served as knives and scrapers.

3. A Gaulish gold coin, found a few years since near the surface on the War Department land. This piece, which weighs 91 grains, is slightly "dished" or scyphate. It is in good preservation; an example of the "charioteer" type, but, as we are informed by the skilful numismatist, Mr. Evans, it is Gaulish rather than British. The type is figured by M. Lambert, from a coin found at Soissons. (*Numism. Gauloise du Nord-Ouest de la France*, pl. vi. No. 5 : *Rev. Numism.*, vol. ii. pl. iii. No. 2.) The nearest approach to this

³ On the site of a Roman villa at East Coker, Somerset, described by Mr. Moore, *Journ. Brit. Arch. Ass.*, 1862, p. 393, there was found a ball of chert, diam. about 2½ in., weight 5 oz. It was supposed to have been "intended for the sling, or to be tied up in a leather thong attached to a staff, and employed as a sort of mace." Implements of flint, a

bead of Kimmeridge shale, part of a bronze spear, with other relics, chiefly Roman, were also brought to light.

⁴ The Lake Dwellings of Switzerland, by Dr. Ferdinand Keller, translated by Mr. J. E. Lee, p. 25, pl. 2. The examples preserved in the Museum at Zürich, and in other collections, are exceedingly numerous.

peculiar type, among coins claimed by Mr. Evans as properly British, is that given in his *Coins of the Ancient Britons*, pl. B. No. 9.

4. Bronze spear-head, of rather large dimensions, unfortunately imperfect, the point and the socket being lost. It was found at a depth of four feet in debris of the Cliff at East Wear, between Verne Hill and the sea. In its present damaged state this weapon measures nearly 10 inches in length; it may, when perfect, have measured about 16 inches, and the leaf-shaped blade, at the widest part, 3 inches in breadth. Towards the lower part of the blade there are two small oblong perforations, or eyelets, one on each side of the central rib.⁵

5. A rudely-fashioned little one-handled cup, of pale brown-colored ware unbaked. This I should consider British, but no other pottery of that period has been found in Portland, so far as I am aware. It measures about $2\frac{1}{2}$ inches in height, by 4 inches in diameter at the mouth. The surface bears a few very irregular indented markings in three rows, that resemble the usual mode of ornamentation occurring on the pottery of the British period, from which, however, this cup differs materially in form; the handle, or ear, at one side, precisely resembling that of the modern teacup, is of unusual occurrence. The Rev. J. H. Austen disinterred in his investigations of barrows on Ballard Down, near Ulwell, Dorset, a one-handled cup of well-burned red ware, which is figured in the *Transactions of the Purbeck Society*, p. 159, pl. xv. That vessel, however, is of a very different form, and has no impressed ornament on its surface; it was found with a skeleton in a cist cut in the chalk, at a considerable depth, near another interment without cremation. Fragments of urns, horses' teeth, and various other relics were collected in cutting through the upper part of this remarkable grave-hill. Mr. Austen found also in a barrow near Wimborne, Dorset, adjacent to Badbury Camp, several interments accompanied by urns of various forms, which have been figured in this *Journal*.⁶ Amongst these

⁵ Compare a spear found in Scotland, and figured, *Horæ Ferales*, pl. vi. fig. 21. The form of the blade in that specimen is of somewhat different type; each of the two small openings having a flange on its outer side. See also a fine spear-head of unusual breadth, Wilde, *Catal. Mus. Roy.*

Irish Acad., p. 496, fig. 365.

⁶ *Arch. Journ.*, vol. iii. p. 350. The urns are more accurately figured in Mr. Warne's *Celtic Tumuli of Dorset*, pl. vii. p. 11. (London: J. Russell Smith, 1866, folio.)

sepulchral vessels are two small cups, ornamented with impressed and incised markings; one of the cups has two small handles near the rim; it was supposed, however, that there might have originally been four of these little pierced appendages, which have occurred repeatedly, as hereafter noticed, on cinerary urns of larger dimensions found in Dorset, and figured by Mr. Charles Warne, in his valuable work on the Celtic Tumuli of that county.

6. A well-formed vessel of light-brown or red ware, of somewhat unusual fashion, and in very perfect condition. It has four small handles around its mouth, and the dimensions are as follows;—height, $5\frac{1}{2}$ inches; diameter, at the widest part, 8 inches; diameter, at the mouth, $5\frac{1}{2}$ inches. It was found accompanying an interment, on the North Common below Verne Hill, and adjacent to Portland Castle.



Vase of red ware found on the North Common, Portland. Diam. 8 in., height $5\frac{1}{2}$ in.

It may deserve notice that small handles, more or less resembling those occurring in this instance, and which are comparatively rare in the *fictilia* of other localities, are to be found not unfrequently in those of Dorsetshire, and some adjacent parts of southern England. These appliances seem suited for the most part for use by a cord or other means of suspension passed through them.

Amongst urns found in barrows in Dorset, and figured by Mr. Warne in his valuable work on the Sepulchral Mounds of the Durotriges, previously cited, several specimens may be noticed that have two, four, or more small perforated projec-

tions, mostly around the upper part of the vessel, but not, as in the urn here figured, close to the mouth. These urns, however, with one exception, differ in form from that found in Portland, and in several instances they are ornamented with scored or impressed markings.⁷

In one of the barrows at Winterbourn Stoke, near Amesbury, examined by the late Sir R. Colt Hoare, and to which, from the rich character of its contents, he gave the title of "King Barrow," an urn was found, differing in shape and colour from any that he had disinterred in British sepulchres. This vessel bears, however, much general resemblance to that above described, found in Portland. It had been placed at the left side of the head of a skeleton deposited in the trunk of an elm, in an oblong cist. The colour of the surface of the urn resembled that of fine red Roman ware, and it appeared to have been made on the lathe, but the paste was only half-baked and black within; Sir Richard concluded that it was of British manufacture; the bronze weapons, moreover, and other relics that accompanied the interment, confirmed that supposition. The proportions of this curious urn differ from those of the Portland specimen: the mouth is narrower; the handles, five in number, are smaller, and placed somewhat more distant from the lip. It seems, however, probable that these two vessels may be assigned to the same early period, and that they were intended for the same purpose, whatever that may have been: the small handles or ears near the mouth seem to indicate a contrivance either for giving facility of transport and suspension, or, possibly, for attaching some covering by which the mouth of the vessel might be closed.⁸

It is remarkable that scarcely a trace of the use of a lid or of any covering has been noticed in the earliest fictile vessels found in the British Islands.⁹ Although not found in Portland, to which the present notices chiefly relate, it may not be without interest to recall attention to a relic preserved in the Dorset County Museum, and which was

⁷ Celtic Tumuli of Dorset, *ut supra*. The urn, fig. 6, plate of urns obtained by the late Mr. Sydenham, bears resemblance in form to that above figured, but it is without handles. It was found inverted, and filled with burnt bones, in a barrow near Dorchester, on the Bridport Road.

Personal Researches, no. xxvi. p. 41.

⁸ Ancient Wilts, vol. i. p. 122, pl. xv.

⁹ An urn, of the Anglo-Saxon period, with a singular cover, on which two little birds are seated, is figured by Mr. C. Roach Smith, *Coll. Ant.*, vol. i. p. 232; *Journ. Brit. Arch. Ass.*, vol. iii. p. 195.

placed amongst various Dorsetshire *ficilia* in the temporary Museum formed during the meeting of the Institute at Dorchester, in 1865. This object, here figured, is of coarse ware; it measures 5 inches in diameter, and has a handle projecting from its upper surface.



Cover of an earthen vessel; found in Dorset. Diam. 5 inches. Dorset County Museum.

7. A vase of the peculiar fashion and ware not uncommonly met with on Roman sites, and, as it is believed, chiefly, if not exclusively, manufactured at Castor, Northamptonshire (*Durobrivæ*). The color of this vessel is of a reddish brown; height about $5\frac{1}{2}$ in.; diameter, at the mouth, 3 in.; the ware is thin, well-baked; the body of the vessel is formed with several oblong cavities produced by pressure with the hand whilst the clay was soft: drinking cups and other small vases thus fashioned occurred in considerable variety in the *ustrinum* at Litlington, and they are figured, *Archæologia*, vol. xxvi. pl. xlv. figs. 15, 17, 19, &c., p. 375.¹ The peculiar oblong cavities may have been intended to give a firmer hold when these vessels were grasped by the fingers in the *symposia*. Portions of these *ficilia* are of frequent occurrence on all Roman sites; at *Corinium*, however, they were comparatively rare; the singular shape must obviously have been conventional, but devised for some specific purpose.

8. A small one-handed vase of black ware, height about $3\frac{1}{4}$ in. Found near the Verne Fort.

9. Portions of various vessels, one of them of somewhat peculiar fashion, having a tubular spout attached to its neck; also numerous fragments of "smother-kiln ware," of black and other pottery, such as commonly occur with Roman remains, and one example of imitative Samian, a kind of ware faced with a red coating, probably manufactured

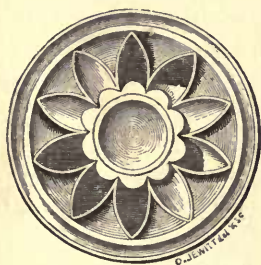
¹ Compare also a specimen in the Museum of Economic Geology, Catalogue of Pottery, &c., p. 78, fig. 53.

in Britain. No specimen of the true Samian has been found so far as we are aware in Portland.

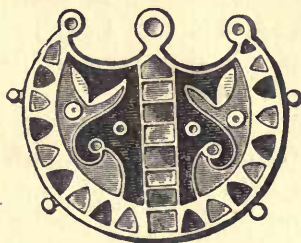
10. Bronze rings, of a size suited for the finger. One of them is of spiral fashion; it was found with or near the finger-bones of a skeleton on the south slope of Verne Hill.

11. A first brass coin of Hadrian, and one of Antoninus Pius, both found near the Verne Fort.

12. An enameled fibula of bronze, a flat disc about an inch in diameter, with a hinged *acus* and a catch on the reverse. It was found at a depth of 2 ft. on the North Common, near the coin of Antonine. It is ornamented with bright red and green color in alternate compartments, forming a wheel-shaped design; around the rim and in the centre the enamel has perished. This pretty little object is of a type not uncommon amongst Roman relics in this country; brooches of circular and other forms have repeatedly been noticed in this Journal, that present examples of the art of enameling by the *champlevé* process, whilst such relics appear to be comparatively rare on the Continent.



Enameled ornament found at Kirkby Thore.



Enameled fibula found at Leicester.

As specimens of this pleasing art in Roman times, two ornaments found in this country are here figured; one of them, of circular form, from Kirkby Thore, Westmoreland, was exhibited in the Museum of the Institute at the York Meeting; the other, in the elegant fashion of a *pelta*, is enriched with red, blue, and yellow enamels. This last was found at Leicester.²

² See notices of other fibulae and Roman enamels, Arch. Journ., vol. xxii. p. 69; vol. xxiv. p. 299; Catalogue of the Caerleon Museum, by Mr. J. E. Lee,

pl. xxviii.; Mr. Roach Smith's Antiquities of Richborough, pp. 83, 84; Journ. Brit. Arch. Ass., vol. i. p. 327; vol. iii. p. 251; and the volume for 1862, p. 224.

13. A hand-molar made of Portland oolite ; it was found at the Verne Fort, and seems to have been the runner or upper stone. Captain Tyler stated that these mill-stones occur not uncommonly ; one was found roughly cut, that may have been in the state as rudely fashioned at the quarry, ready to be taken elsewhere for the final dressing of its surface. The examples that have been preserved measured about 20 in. in diameter. I have not elsewhere met with examples formed of Portland stone, but the cherty nature of that material would give a sufficiently sharp "tooth" for the required purpose.³

14. A perforated object of chalk, that may have been a *discus* or quoit ; the material is very hard ; the induration, as I imagine, being due to long exposure possibly on the Chesil Beach, where it may have become flattened as a rolled pebble, in which a central perforation, about three-quarters of an inch in diameter, has been roughly cut. This disc measures about 5 in. in diameter, and it is of considerable weight and thickness.

Several perforated discs of baked clay, similar in their dimensions and general appearance to the object of chalk above described, have been found with Roman remains in England. The late Lord Braybrooke brought to light several examples in the course of his excavations in Cambridgeshire ; they are now preserved in the Museum formed by him at Audley End. A like annular object of terra-cotta was found near Castor, Northamptonshire, by the late Mr. Artis, and it has been figured by him as a weight.⁴ The central perforation is of greater width than that in the disc found in Portland, and there are three roughly impressed markings at regular intervals around the rim, that may have been produced by the blunt end of a stick. It has been supposed that some of the massive rings of baked clay of this description may have served as stands for fictile vessels that were formed with a knob or blunt-ended extremity at the base, and on that account could not stand without some such appliance, as exemplified by a *lagena* found by Lord

³ Hand-mill stones, of various materials, similar in form to that above described, occur frequently on sites of Roman occupation. Compare specimens found at Castor, Northamptonshire ; Artis' *Durobrivæ*, pl. xiv. The querns

there noticed were of bur, pudding-stone, and burnt clay.

⁴ *Durobrivæ* of Antoninus Identified : by E. T. Artis, pl. xxix. fig. 6. This example measures about $4\frac{1}{4}$ in. in diameter.

Braybrooke at Great Chesterford, Essex, with a thick ring of terra-cotta, and figured in this Journal.⁵ The clay rings of similar fashion that occur in great numbers on the sites of Pfahlbauten in the Lakes of Switzerland, and vary in diameter from $3\frac{1}{2}$ in. to $9\frac{1}{2}$ in., have likewise been regarded as stands for earthen vessels; the fictilia there found having very commonly a pointed or round base, so as to require some such support.⁶

15. A small disc of red ware, apparently Roman, perforated in the centre. It may have served as a rude fastening of the dress, or more probably as a counter used for some kind of game, the holes in objects of this description being for the purpose of stringing them together. Diameter nearly $1\frac{3}{4}$ in., thickness about $\frac{1}{4}$ in. Such little discs, frequently of Samian or other Roman ware, and also of stone, occur commonly on Roman sites; they have been described as *verticilli* or spindle-whorls, flat beads, buttons, *latrunculi* or pieces for some disport resembling the game of tables, the mediæval prototype of draughts, and the like.

16. A specimen of the so-called "Kimmeridge coal-money," that has been found abundantly in the Isle of Purbeck, at Tyngham, Povington, Encombe, Smedmore, and other places, especially near Kimmeridge Bay, and the localities where the beds of bituminous shale occur known as "Kimmeridge Coal." These singular relics were first described by Hutchins in 1768, as found in rudely formed cists and elsewhere, and called by the country people "Coal Money,"⁷ A more full notice was given in 1825 by Mr. N. A. Miles, in his description of the Deverel Barrow, Dorset; several examples are there figured. In 1844 the late Mr. Sydenham, at the first Archæological Congress, at Canterbury, brought forward the solution, previously suggested by the Rev. W. Barnes, of the antiquarian enigma, "Coal Money," showing beyond controversy that it consists of waste pieces from the lathe, thrown aside in the manufacture of armlets, beads, and other objects, extensively carried on by the Romanized Britons in the Isle of Purbeck.⁸ This

⁵ Arch. Journ., vol. xviii. p. 123. The diameter of this ring is 3 in.; the central opening is much wider than in the relic found in the Isle of Portland.

⁶ Keller, *Lake Dwellings of Switzerland*, translation by Mr. J. E. Lee, pp.

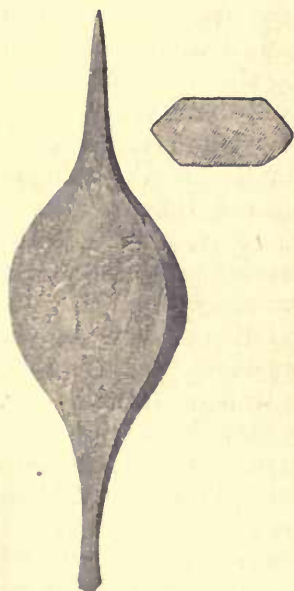
145, 177, pl. xxxviii. fig. 14.

⁷ Gent. Mag., March, 1768, p. 111; Hutchins, *Hist. Dorset*, vol. i. p. 445. See Mr. Barnes' letter, *G. Mag.* XI., N.S., p. 114.

⁸ Arch. Journ., vol. i. p. 347.

curious subject has been fully discussed also by the Rev. J. Austen, in the Transactions of the Purbeck Society, where numerous examples have been figured.⁹ The specimen found near the Verne Fort, the only relic of this description hitherto noticed in the Isle of Portland, appeared on that account deserving of notice, although the "Coal Money" is familiar to us as found in many other parts of Dorset, and frequently in proximity to Roman remains. We are indebted to Capt. Mainguy, R.E., for information that within the old entrenchment on the upper portion of the west slope of Verne a grave was found that had pieces of Kimmeridge shale used as a lining of the cavity.

17. Two instruments of iron; their age and the purpose for which they were intended has not been ascertained. One



Iron object found in Portland. Length 20 inches. Weight 14lbs.

of these objects is here figured. It measures 20 in. in length, 4 in. at the widest part, and 2 in. in thickness; one extremity formed with a point, the other resembling a small chisel. The edges are bevelled off towards each face, so that the section, at the widest part, is an oblong hexagon. Length of the second is 23 in. Weight 14lbs. and 15lbs. respectively. It has been thought that these objects may have been tools used at some ancient period in quarrying or in dressing the stone, a purpose, however, for which, considering their weight and the difficulty of holding such an implement in the hand, they appear little suited. It has, however, been suggested, and we believe that the supposition has been accepted

by one of our most sagacious antiquaries, Mr. A. W. Franks, that these ponderous objects may have been *massæ*, or blocks of metal, of a certain conventional form, in which possibly the iron of some particular

⁹ Papers read before the Purbeck Society. p. 82, and a very interesting supplementary notice, p. 221. See also a

short memoir by Dr. Wake Smart, Journ. Brit. Arch. Assoc., vol. i. p. 325, where several specimens are figured.

mines was sent forth in commerce. This notion, indeed, may appear in some degree confirmed by comparison of the singular blocks of iron, with pointed extremities, irregularly pyramidal in form, found chiefly in Switzerland, and described in this Journal by Dr. Keller.¹ The metal is stated to be of peculiar quality, produced, as supposed, by the metallurgical process termed Catalonian, and Dr. Keller considers these *massæ* to be blocks of iron imported from some foreign parts at a remote period in the peculiar form that, for some unknown cause, had been adopted in their manufacture. The objects, of which specimens are preserved in the museum at Zürich, vary in their dimensions; the weight is from 10 to 16 *livres*. It may deserve notice that the iron objects found in Portland were brought to light on the North Common, below the Verne Hill, near the enameled fibula, before described, and a coin of Antoninus, about 3 or 4 ft. below the surface, not far from some interments, believed to be of Roman date, in cists of stone.

It is scarcely necessary to invite attention to the interest connected with any object that may possibly throw light on the early manufacture or supply of iron in Britain. The only fact hitherto noticed, it is believed, is the discovery of three pigs of iron at the Roman villa on the estates of the Earl of Eldon at Chedworth Wood, Gloucestershire, as mentioned by Mr. Farrer in the Proceedings of the Antiquaries of Scotland, vol. vi. p. 282. The largest of these *massæ ferri* measures 5 ft. 4 in. in length, 10 in. in breadth, and about 4 in. in thickness. The weight of these three relics is 484 lbs., 356 lbs., and 256 lbs. respectively.

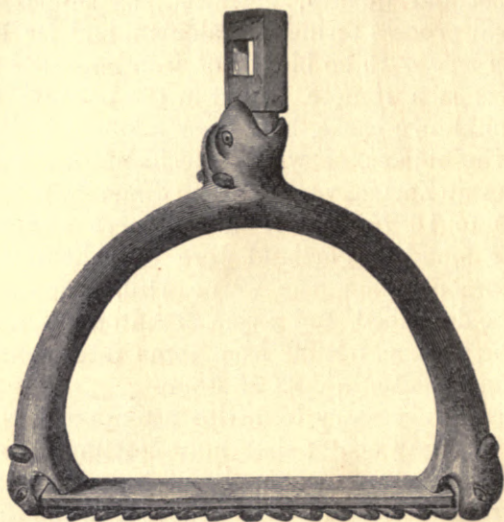
18. A bronze stirrup, found at a depth of four or five feet below the surface on the top of the Verne Hill. It is here figured. This is an object of uncommon occurrence, and an example of metal-work of very skilful workmanship. It may be assigned to the close of the twelfth, or commencement of the thirteenth, century.² The grotesque heads of animals are finished with considerable spirit, and characteristic of the period during which zoomorphic ornamentation was much in vogue. On the under side of the horizontal plate on which the sole of the foot rested, there is a narrow

¹ Arch. Journ., vol. xvi. p. 200.

² Beckmann, in his History of Inventions, has a dissertation on the antiquity of stirrups, with some notices of their

use in mediæval times. They do not appear to have become common as early as the twelfth century.

row of dentated projections, of which the edges only appear in the woodcut; the object of this dentation is not obvious, since that part of the work was almost concealed from view. Amongst the few ancient objects of this description may be noticed a stirrup-iron, found with an iron javelin head in the



Bronze stirrup found on the Verne Hill, Portland. Two-thirds orig. size.

bed of the Ouse near Lewes. It was preserved in the museum formed by the late Dr. Mantell, and has been regarded as a relic of the conflict between Henry III. and De Montfort in 1264, when a large number of the king's followers perished in the river.³

An interesting example of metal-work of early Norman character, in brass, may be cited for comparison with the remarkable relic above described. It is a small prick spur found at Pakenham, Suffolk; the extremities of the shanks, formed to receive the leather straps, are fashioned like heads of animals, as is also the projection from which the

³ In the Proceedings of the Society of Antiquaries, vol. iii. p. 520, a brass stirrup, exhibited by Mr. J. D. Niblett, is described. It was found at Barber's Bridge, near Tibberton, Gloucestershire, and is "of highly pointed form, 9 in. high from the base to the attachment of the stirrup leather, and damascened with scroll work. Both in form and in the pattern of the

ornamentation, something of an oriental character appeared." Its date was considered to be the thirteenth century. A similar stirrup of brass, richly inlaid with scroll work of white metal, was presented to the Institute at the Lincoln Meeting. It had been found in the bed of the river Witham near that city, and may now be seen at the British Museum.

point of the spur issues. The design appears in this instance intended to represent the head of the horse, frequently to be noticed in Anglo-Saxon ornaments; in the stirrup the head seems to be that of a lion or a dragon.

In addition to the relics that have been described may be mentioned a silver coin, a penny of Henry III. struck in London, as appears by the legend on the reverse—*TERRI ON LVND*—Terri le Chaunier being the moneyer; he was, as we are informed by Mr. Evans, one of the Keepers of the Mint in 1222.

Capt. Mainguy has also reported the discovery of shot on the North Common, which commands Portland Castle. One of these is a small cannon-ball of iron cased in lead, a practice occasionally used in ancient artillery.

The objects thus enumerated as brought to light in Portland clearly indicate the traces of different peoples and periods, and beyond doubt the island was inhabited by a British tribe, in times when implements of stone were employed; and, if not actually fortified by the Romans, it was unquestionably colonized or occupied by them. Careful investigation, especially in the progress of public works, may hereafter reveal more extensive evidence of such successive occupation. It is hoped that the foregoing notices of such remains as have been brought to light may stimulate further inquiry in a locality of considerable interest. Meanwhile the cordial thanks of antiquaries are due to the officers of the Royal Engineers stationed in the island for their courtesy in aiding our enquiries, and affording all desired information. It has been highly gratifying to witness that no fact escapes their vigilant observation, and every relic that may be disinterred in the extensive operations under their directions is carefully preserved.

Whilst the foregoing memoir was in the press, we have received from an obliging correspondent in Portland, Capt. Ferguson, R.E., the suggestion that the remarkable objects (No. 17, *ante*), may be examples of a primitive form of "hand-jumper," the tool used for boring stone for blasting. The mode now used is to pierce a row of holes, the block being then split with the aid of "wedges and feathers." Capt. Ferguson observes, with great probability, that the rough edges of the implements above figured may have been bevelled to save the hand from injury.

GOLD PECTORAL CROSS FOUND AT CLARE CASTLE,
SUFFOLK.

By the gracious permission of Her Majesty the Queen, the Members of the Institute had the privilege of examining an object of great interest and beautiful workmanship, that had been brought to light on the site of one of the ancient castles in East Anglia, formerly in possession of the Crown. The Clare Cross, now preserved at Windsor Castle amongst the jewels and relics of ancient art highly prized by Her Majesty, was entrusted to us for exhibition at a recent Meeting of the Institute in London.¹ The Society will hail with gratification that renewed evidence of gracious condescension and favor towards the Institute.

The precious object, of which we are permitted to give the representations that accompany this notice, was found at Clare Castle about the autumn of 1866, in the course of works connected with the formation of the Cambridge and Colchester branch of the Great Eastern Railway. The laborers employed by the contractor, Mr. Holt, had been engaged in cutting down part of the enceinte of the Inner Bailey, which has been taken as the railway station. After they had ceased working, the golden relic was noticed by a lad named Walter Lorking in the gravel, in the spot it is believed where it had lain concealed. It passed subsequently into the hands of Mr. Holt, by whom it was delivered up to the Rev. Stephen Jenner, the owner of the site of Clare Castle; by him information of the discovery was sent to Her Majesty's Treasury. The circumstances having been reported to Sir Charles Phipps by Mr. G. A. Hamilton, one of the secretaries, the Queen expressed her desire to possess the cross. It had, moreover, been suggested that it might have been part of the royal jewels in the times of

¹ The cross was sent, through the obliging mediation of the Queen's Librarian, Mr. B. B. Woodward, and placed

before the Society at the Monthly meeting, on Dec. 6, 1867.



Gold Cross found, 1866, at Clare Castle, Suffolk.

In possession of Her Majesty the Queen. (Original size).



Edward III., and had possibly been given to his granddaughter Philippa, who in 1368 espoused Edmund Mortimer, Earl of March. This conjecture seemed in some degree supported by the fact that upon her marriage she had for some time resided at Clare Castle. It may deserve notice that the cross was found near the place known as "The Lady's Walk."

The particulars connected with the finding of the cross having been made more fully known to Her Majesty by Mr. Jenner, she was pleased to transmit, through Sir Thomas Biddulph, keeper of the Privy Purse, a remuneration for the finder, Walter Lorking.

This beautiful specimen of goldsmith's work is appended to a gold chain of corded links, the fashion and dimension of which are shown in the accompanying woodcuts. This chain measures about 2 ft. in length: the cross measures about $1\frac{1}{2}$ in. in length; it is delicately worked on both of its sides, and at each of the angles, where the limbs of the cross are conjoined, a fine oriental pearl is affixed. On the obverse there is a small cruciform plate bearing a minute representation of the Saviour, that may originally have been enameled. Some slight trace of red enamel may be discerned. The process of art seems to have been that designated translucent in relief. Over the head is seen a little scroll inscribed INRI. The same four letters, the initials of the words written on the *titulus*, are also found, one on each of the limbs of the cross, minutely stippled, and accompanied by trailing ornament. It will be noticed that these letters are placed in direction, so to speak, radiating from the central crucifix. On removing a small pin, on each of the edges, the plate forming the central portion, namely, that which bears the crucifix, as has been described, may be taken off; in the shallow cavity thus revealed to view within the cross, a diminutive piece, apparently of wood, is to be seen, and also a fragment that seems to be of granite, possibly, or of some other stone. It has been supposed that one of these relics may be a portion of the True Cross; the other, of the rock of Calvary or some of the Holy Places. It is, however, scarcely practicable to determine the material of which these minute relics may consist; that last mentioned may indeed be of bone, and not, as had been conjectured, of some stone hallowed by its association with sacred story.

The weight of this ornament is 1 oz. 7 dwts. 3 grs. ; the cross weighs 7 dwts. 7 grs. ; the chain weighs 19 dwts. 20 grs. The whole value, according to mint price of standard gold, is about 5 guineas.

The date to which this precious object should be assigned has not been satisfactorily determined. It has been regarded as of Italian art, towards the latter part of the fourteenth century. The peculiar mode of ornamentation, by stippled or pounced work, of which more detailed mention will be made hereafter, is the familiar enrichment found on the grounds of burnished gold in paintings, those especially of the early Italian Masters. Mr. Franks, however, in whose discernment and skill in all such questions I have the most entire confidence, has been disposed to suggest 1450–1480 as the probable date of the cross.

The precise period to which we may ascribe the workmanship of the ornament is obviously a point of much interest, as bearing on the enquiry, who may have been the original owner of so costly a relic. I have sought in vain—in the forms of letters, all of them minuscules, in the design of the crucifix, and in conventional peculiarities of the foliated ornament,—to discover any well defined indication of date. It will, however, be material, in this enquiry, to notice carefully the precise position in which the cross lay concealed. I may here, before entering upon that part of the subject under consideration, refer to the excellent series of plans and sections of the remains of Clare Castle taken by the late Mr. Kerrich, in 1785, and preserved in his valuable collections, that specially illustrate architectural and monumental antiquities in Cambridgeshire and East Anglia, now to be found at the British Museum, Add. MS. 6735. The plans of Clare Castle have been reproduced on a small scale in illustration of a memoir by Mr. Tymms, in the proceedings of the West Suffolk Archæological Institute.² It will be seen that a very few portions of walling remain ; the site consists of an extensive series of embankments enclosing an Outer and

² Vol. i. p. 61. The valuable collections by Mr. Kerrich, formerly public librarian in the University of Cambridge, are contained in 31 portfolios and folio volumes, marked Add. MSS. 6728–6759. In the same volume above cited there are plans and notes of Castle Acre, Castle Rising, Castle Hedingham. Besides

numerous drawings of effigies and sepulchral brasses, painted glass, and architectural subjects, in England and on the continent ; this instructive series comprises collections for the special history of seals, also illustrative of armour, costume, &c.

Inner Bailey, with a conical mound, or *motte*, of considerable elevation, that may have been one of the chief features of the stronghold that existed at Clare previously to the Conquest. The laborers employed by the contractor, Mr. Holt, in making the requisite arrangements for the railway station that has been placed, as already mentioned, in the Inner Bailey, had been cutting down obliquely a part of a mound, about 12 or 15 ft. in height, part of the enceinte of the Inner Bailey. When the men had left their work, part of the glittering metal accidentally caught the eye of the boy, before named; it lay, *in situ*, as I am assured, in the gravel of which the mounds are formed, and about 3 ft. from the top of the embankment. This portion of the gravel had not been disturbed by the men; there was no trace of mixture of any *débris* from the ancient surface with the gravel, nor of anything, as a box, or the like, that might have inclosed the cross and chain, if they had been hidden in olden times. The Inner Bailey, it should be observed, was surrounded by a moat and a high mound; on the latter of these was a wall of which very little is now left, and no portion remains on the part of the mound in question. The laborers had been engaged in widening a way through the mound, at a part where was once the principal, if not the only, gateway to the Inner Bailey, and which no doubt was strongly fortified. There may also have been, as it seems, a small barbican on the opposite side of the moat. Here doubtless the wall, now wholly gone, was a strong one. It may be well to add that the spot where the cross was found is towards the inner side of the mound, namely, inside of the ground where the wall stood. It is therefore not likely to have been disturbed when the wall was removed.

It should certainly appear probable that the cross and chain were lost or deposited before the mound was raised to its recent height, and before the wall there was built. The great bulk of the mound must, in all probability, have been raised many years before. The original mound may even have been pre-Norman: possibly both the mound and the wall may have been heightened without destroying the original wall.

The time when the walls were ultimately demolished has not been ascertained. The credit of the mischief has, of course, been sometimes ascribed to Cromwell.

It has seemed desirable to describe minutely the position and the precise conditions of the embankment in which the gold cross lay; the occasion, however, of its being thus deposited remains involved in uncertainty. Very little is known of the history of the Castle beyond its having devolved by descent from the Clares to a Burgh, whose heiress married Lionel Duke of Clarence. Philippa, their heiress, married Edmund Mortimer, whose grandson, the last of his family, found the castle in good repair and well stocked with furniture when he came of age in 1412. On his death in 1425 it came to his nephew Richard, afterwards Duke of York, father of Edward IV. There is no reason to suppose that the defences of the castle were strengthened in those times; it is, however, possible that something may have been done to raise the enceinte near the gateway after Richard, Duke of York, aspired to the crown, *c.* 1449 to 1460. After the accession of his son to the crown, in 1461, it is very improbable that any work should have been carried out, for, although the Civil War was renewed in 1470, it ceased in the following year, and the castle continued vested in the crown until it was granted by Edward VI. to Sir John Cheke. It is remarkable that it does not appear that Clare Castle was ever besieged or suffered in any manner from war.

The precious object that, through the gracious condescension of the Queen, we have been permitted to examine, appears to claim a few additional remarks, in regard to the peculiar ornamentation that it exemplifies, and the comparison of its details with those presented by other mediæval productions of the goldsmith's art. It has been already noticed that the delicate trails of foliage and minute twining designs that appear on each side of the cross, are produced by the process technically designated, "*opus punctatum*,"—in French, *pointillé* or *poinçonné*, pounced work—much in fashion during the fourteenth century, and probably even at a somewhat earlier period.³ M. de Laborde, in his valuable Glossary illustrative of the Arts of the Middle Ages, cites the description of a cup, "*poinçonnée à branches et à oyseaulx*," and observes that "*le poinçon donne un travail de pointillé: c'est le genre d'ornement le plus ordinaire au xv^e siècle.*" Numerous examples are found in Inventories; it

³ Notice des Emaux, bijoux, &c., Documents et Glossaire; 1853; see p. Musée du Louvre, par M. de Laborde; 455.

may suffice to cite the lists of the plate and jewels of Edward III., amongst which occurs continually some object described as *poinsé, ponsoné, poncéne*, &c., such as a pair of enameled basins, "gravez en bordure ovesque un traile de vyn ponsonez dedeins et dehors."⁴ This kind of enrichment was doubtless produced by means of a small pointed punch and the hammer, such delicate stippled work on metal being sometimes termed *opus mallei*. It was closely in harmony with the practice of the early painters, of whose productions, both in illuminated MSS. and in works of larger dimensions, numerous examples occur having gilt grounds burnished and ornamented with impressed patterns, to which also we find reference in ancient treatises on the arts, and in accounts of expenditure. Cennini, whose *Trattato* was written about the close of the fourteenth century, describes the operation of indenting (*granare*) the gilded field by means of a pattern-stamp termed a *rosetta*.⁵ The prevalent use of such minute enrichments was shown, not only on the works of the goldsmith and the enameler, but likewise on metal-work of large dimensions, such as monumental effigies and the like. The best examples of such pounced work are the sepulchral portraitures of Richard II. and his queen at Westminster, described by Mr. J. Gough Nichols in the *Archæologia*, and figured by Mr. Hollis. The elaborate patterns that cover the whole of these figures and the brass platform whereon they were placed, which were wrought by two London coppersmiths in 1395, had been long concealed by incrustation of dirt and damp; they were brought to light, about 1840, by Mr. T. Hollis, whilst making the drawings for his elaborate plates of these memorials.⁶ The robes are powdered with badges,—the broom plant, rising sun, white hart, &c., intermixed with the initials of the king and of Anne of Bohemia, crowned; also running trails of leaves and flowers, such as are described in Inventories and Accounts as *foeillerie*, or *vinets*, closely resembling the

⁴ Kal. Exch. vol. iii. p. 322. An exquisite mirror may claim notice:—"un merour doré steant sur un arbour garnesé de v. perls, aymelez de rose et poncéne de une roser, en l'un costé un glas, en l'autre costé une roygne." Ibid. p. 321. Compare the Inventory of Crown Jewels, ii. Hen. VI., Rot. Parl., vol. iv. p. 217, and many similar documents. Many examples of pounced work from inventories, &c., are

cited by Mr. Gough Nichols, *Archæologia*, vol. xxix. pp. 55, 56. See also Royal Wills, p. 227.

⁵ Sir C. Eastlake, *Materials for a History of Oil Painting*, p. 124.

⁶ The contract for the work to be executed by Nicholas Broker and Godfrey Prest, citizens and coppersmiths of London, is printed in Rymer's *Fœdera*, vol. vii. first edition.

stippled ornaments of the cross found at Clare. Another remarkable specimen of such work is found in the sepulchral brasses of Thomas de Beauchamp, Earl of Warwick, who died 1401, and his lady; the heraldic tinctures and some portions of the costume of both these effigies are enriched with minute pounced work in foliated designs of great delicacy, and forming trails of *foecillerie*, characteristic of the period.⁷ I may cite one other sumptuous example, the life-size effigy of brass in the choir of the church of Baden Baden, that commemorates Frederic of Baden, bishop of Utrecht, who died in 1517. He is vested in a rich cope over a full suit of armour set with numerous jewels; the armour and other portions of the work are exquisitely stippled with foliated and other patterns.

The minuscule letters and delicate twining ornaments on the four extremities of the limbs of the cross found at Clare, seem to claim comparison with the royal initials on the effigies of Richard II. and his Queen. The foliations that occur in that instance, and in other works that have been cited, are less simple than those upon the reverse of the cross in question; it has been imagined that these last, if indeed any type of leaf was copied, may have been taken from the olive or the laurel, and even that in such supposed assimilation to natural forms some confirmation of the Italian origin of the jewel might be traced. The repetition of the *titulus* may deserve notice, occurring in the usual manner over the head of the crucifix, whilst the initials of the words are also severally placed on the limbs of the cross, as previously noticed.⁸ The inscription on the *titulus*,—Jesus Nazareus Rex Judeorum,—is found constantly on personal ornaments, such as rings and brooches, and on other objects. It is probable that it may be regarded as thus used with a certain notion of physical or talismanic virtue, and that objects thus inscribed became *virtuosi*, or were regarded as possessing a certain efficacy against calamities, sickness, or other mischances. The like talismanic or even cabalistic efficacy, it is believed, was anciently attributed to the Angelical Salutation, and to some other phrases associated

⁷ These effigies have been admirably engraved by Messrs. Waller in their *Sepulchral Brasses*.

⁸ Much has been written on the *titulus*;

see a dissertation by M. Drach, *Annales de la Philosophie Chrétienne*, vol. xviii. pp. 291, 341.

with memorable incidents in sacred story. Amongst numerous examples of the use of the *titulus* may be cited a betrothal ring thus inscribed, found at Titsey Park, Surrey;⁹ there are several such rings in the collection formed by the late Lord Braybrooke; ring-brooches thus inscribed are also of very frequent occurrence.¹ Gelasius de Cilia, in the curious Treasury of benedictions, exorcisms, charms, &c., gives several in which the *titulus* is introduced; for instance in the exorcism of the *charta*, or written charm, efficacious against demons and spectres, which commenced with a cross placed, like the little crucifix on the cross found at Clare, between the four letters I. N. R. I. In the Benediction against Tempests we find the sentence—"Jesus Nazarenus Rex Judeorum,—Titulus triumphalis benedicat et custodiat nos ab omnibus malis;" and in the solemn Exorcism of persons betwitched ("contra omnia maleficia") the demon was adjured "per triumphalem titulum," which is directed to be written on the forehead of the sufferer.²

The subject of physical charms of this description presents a curious section of Popular Antiquities, that has by no means been worked out in the extensive collections formed by Brand and those who have augmented his notices. Some singular examples might be cited from the Book of Exorcisms above cited; other charms have been brought before the Institute, such as the mysterious word *AGLA*; the last words also of the crucified Saviour—"consummatum est"—held to be of sovereign virtue in staunching blood and healing wounds,³ and the passage in Luke iv. 30—"Jesus autem transiens per medium"—relating our Lord's escape from the malice of the people of Nazareth. This last, which is likewise found on coins of Henry VI. and of other sovereigns, is given by Sir John Maundevile as a charm against perils from robbers in travelling, or from enemies.⁴ These talismanic words occur on a ring set with a sapphire in

⁹ Described, Proceedings Soc. Ant., vol. ii. N.S., p. 103.

¹ Several examples have been noticed in this Journal. See also Journ. Brit. Arch. Ass., 1862, pl. xii. p. 229. Two such brooches are in the Edinburgh Museum, one of them bears the angelic salutation with the *titulus*.

² Locupletissimus Thesaurus continens sarias et selectissimas benedictiones, conjuracionis, &c. A. Gel. di Cilia; edit.

quinta, Aug. Vindel, 1733. See pp. 143, 380, 680.

³ This charm is inscribed on an Italian buckler in possession of Mr. W. J. Bernhard Smith. Arch. Journ., vol. x. p. 85.

⁴ Voiage of Sir John Maundevile, p. 137, edit. 1725. Another charm against wayside dangers is there given, taken from the Psalter, to be said thrice, "Irruat super eos formido et pavor," &c., "and thanne may men passe with outen perile."

possession of the Rev. Edwin Jarvis, date fifteenth century, and on another, of Italian workmanship, belonging to Mr. Waterton.

It is scarcely necessary to observe that it was not unusual to enclose within a pectoral or other cross some minute relic, and especially a portion of the True Cross. The Emperor Nicephorus, in 811, sent to Pope Leo III. a golden pectoral cross, with another enclosed in which were certain particles of that most sacred object. It has been supposed that the Clare cross may be the identical object mentioned in an enumeration of jewels belonging to Edw. III., and deposited for safety at the Tower of London—"un croys d'or double overé de triffure, que est de la croys Jhesu Crist, et ne peut estre preisé." Amongst relics delivered to the Treasurer of the Exchequer, 18 Edw. III., is found "*una crux argenti deaurati cum parte de ligno nigro in medio.*" In the long enumeration of relics inserted in the rich cross preserved at Oisy, between Douai and Cambrai, are found particles—"de ligno," "de columna ad quam Dominus ligatus fuit," &c. Humphrey de Bohun, Earl of Hereford, bequeathed, in 1361, to Humphrey, his nephew, a gold nouche and a pair of paternosters, together with a cross, in which is a piece of the true cross of our Lord.⁵

The other diminutive relic enclosed within the cross submitted to us by gracious favor of the Queen has been conjecturally described as of stone, resembling granite. This is by no means improbable. Relics of such a nature brought from the Holy Places are not uncommonly mentioned. Edmund, Earl of March, devised to Lesnes Abbey, in Kent, a "*piece de piler n're Seignour.*"⁶ The abbey of St. Denis possessed many remarkable relics bestowed by St. Louis, including "*plusieures morceaux de porphyre des colonnes et des degrés du temple de Salomon rapportés par St. Louis.*"⁷ At Saumur were to be seen fragments of the rocks rent asunder when our Lord yielded up the ghost. The most remarkable relic, however, of stone occurs in the long list of

⁵ Nicolas, *Vest. Vet.*, p. 67. Edward, Earl of March, bequeathed in 1380 to Wigmore Abbey a cross of gold set with stones with a relic of the cross of our Lord, and other relics. *Ibid.*, p. 111, Philippa, Countess of March, bequeathed to her son "*un anel d'or ove un piece de la vraie croyce.*" *Royal Wills*, p. 100.

⁶ *Royal Wills*, p. 105.

⁷ This tradition is mentionnd by Sauval. See De Laborde, *Glossaire*, before cited, p. 479. In the long list of relics in the Cross at Oisy, near Douai, we find "*de columna ad quam Dominus ligatus fuit.*" *Revue de l'art Chrétien*. t. ii. pl. vii.

the *Jocalia* of Edward I. in 1299. We there find "diverse petre de la Quarenteyne."⁸ The rugged desert and precipitous cliffs to the south of Jericho, known from an early period as *Quarantana*, and to this day by an equivalent Arabic designation, are the traditional scene of Our Lord's Temptation and Fast during forty days, whence the name was derived.⁹ This desert was one of the Holy Places much resorted to by pilgrims, and it was the abode of many hermits. "Upon that hille," says Sir John Maundevile, "the enemy of Helle bare oure Lord, and tempted him, and seyde, 'Dic ut lapides isti panes fiant,' that is to seye, sey, that theise stones be made loves."¹ Dr. Robinson informs us that the tradition and the name appear not to be older than the age of the Crusades. There can be little doubt that the *petre* treasured by Edward I. had been brought from that spot as relics of the stones presented to our Lord by the Tempter. They may have been obtained during Edward's expedition to Palestine, in 1270, memorable by his deliverance from the envenomed stroke of the assassin at Ptolemais through the devoted affection of Eleanor his consort.

By courteous permission of the Council of the Society of Antiquaries I am enabled to give, with this notice of the beautiful ornament so graciously entrusted to us by Her Majesty, a representation of another object of somewhat similar description likewise found at Clare. The discovery, which occurred in April, 1797, was brought under the notice of the Society by Mr. Thomas Walford, F.S.A., compiler, as I am informed, of a History of Clare. The MS., it is believed, is in the possession of the Rev. J. C. Coleman, vicar of that place, by whom it is hoped that memorials of the castle and its owners may hereafter be published. In the library of the Society of Antiquaries there is a drawing of the object in question, described as "a brass ornament, supposed to be an amulet, found within the fortifications of Clare in the county

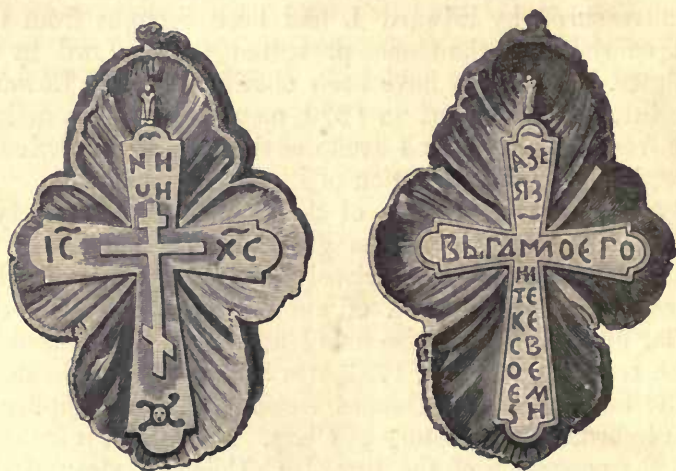
⁸ Household Book, published by the Society of Antiquaries, p. 349.

⁹ See Ducange, *v.* *Quarentena*, and writers there cited, by whom the Desert of the Temptation has been noticed. The season of Lent, *Quadragesima*, or *Carena*, Fr. Carême, was likewise called *Quarentena*. See Dr. Robinson's account of the Mountain of the Temptation near Jericho, *Bibl. Researches*, vol. i. p. 567. The place is first named as the scene of the

Temptation by Sæwulf, about 1103; it is first called *Quarantana*, or *Quarënnia* in 1211.

¹ *Voiage* of Sir John Maundevile, p. 119, ed. 1725. The wild scene and mountain of the "*Quarantania*" is described by Maundrell, who visited the place, March 29, 1697. See Kitto, *Physical Hist.*, p. 39. The *Quarantania* is mentioned also by the Dean of Westminster. *Sinai and Palestine*, p. 302.

of Suffolk.”² To the friendly assistance of Mr. Knight Watson I am indebted for this information, and for the drawing here reproduced. The ornament appears to have been worn by some Christian of the Greek church ; there seems to have been at the top a small projecting loop or adjustment for suspension ; it may have been an *encolpion*, a pectoral cross, or possibly the cover of a small oval pyx or reliquary. The sacred emblem, it will be seen, is introduced on each side of the object, within a quatrefoiled frame, possibly intended to represent an *aureola*. There is no figure of the Saviour ; on one of the sides the centre is occupied by a second plain cross, in the outline of which may be noticed the *titulus* at the head, and the diagonal rest for the feet of the crucified



Brass ornament, probably a pectoral cross, found at Clare Castle.

one ; on the extremities of the limbs of the cross appear the names of our Lord, according to customary Greek contractions ; at the foot is seen the skull and bones, frequently so placed in allusion to Golgotha, or to the grave of Adam, in whose sepulchre, according to certain legends, the cross of our Lord was fixed. The fashion of the reverse bears resemblance to that of the other side, but the small plain cross is omitted, and an inscription is introduced, of which I am

² By courteous favor of the Council I am permitted to publish this curious

relic. MS. minutes Soc. Ant. Lond., May 4, 1797; vol. xxvi. p. 313.

unable to offer a satisfactory interpretation. Mr. King suggests that it may be a barbarous phonetic form of the common spelling—ΑΓΛΑ. ΤΕΤΡΑΓΡΑΜΜΑΤΟΝ. ΤΕΚΕ. ΒΟΗΘΕΙ. ΜΟΙ.—It seems probable that **TEKE** may be a corruption of **ΘΕΟΤΟΚΕ** (Mother of God). A careful examination of Byzantine or Russo-Greek ornaments may doubtless supply a more precise reading, and enable us to determine the date and purpose of this remarkable relic. Several other relics of interest have from time to time been brought to light at Clare Castle. In 1802 an oval hammer-head of stone, perforated for the haft, was brought before the Society of Antiquaries of London by Mr. Walford. It measured 5 in. in length, $2\frac{1}{2}$ in. in width at one end, and 2 in. at the other;³ it was found in a vallum of the castle, and may be regarded possibly as an evidence of the occupation of the site in times anterior to any historical record.

ALBERT WAY.

³ *Archæologia*, vol. xiv. p. 281, pl. lv. Compare an ovoid hammer-head of fine red stone, in the British Museum, quite

symmetrical, length $4\frac{1}{2}$ in.; figured in *Horæ Ferales*, pl. iii. fig. 8.

Original Documents.

WILL OF SIR JOHN STANLEY, OF HONFORD, CHESHIRE. DATED JUNE 20, A.D. 1527.

FROM THE MUNIMENTS OF THE DEAN AND CHAPTER OF WESTMINSTER.

Communicated by Mr. JOSEPH BURTT, one of the Assistant Keepers of the Public Records.

At the recent annual meeting of the Archæological Institute at Lancaster, a memoir was communicated to the Historical Section by Mr. Beamont, of Warrington, to whose friendly assistance we have on several occasions been indebted, in which certain particulars connected with the Lancashire branch of the noble house of Stanley were brought under our notice.

The discourse, so appropriate to the locality which on that occasion specially engaged our attention, related chiefly to Sir John Stanley, of Honford, a worthy honorably enrolled amongst the heroes of the field of Flodden, where it is believed that he won the distinction of knight-hood. His martial spirit and gallant prowess might have well-nigh availed to efface the stain of base birth by which unfortunately his escutcheon was marred.

It is hoped that Mr. Beamont may hereafter give us at length the interesting "Notes on the Lancashire Stanleys," the result of his recent investigation of some obscure passages in the annals of one of our most distinguished families.

Sir John Stanley, it is stated, was a natural son of James Stanley, elected Bishop of Ely in 1506, who was sixth son of the first Earl of Derby, Great Constable of England. The bishop was warden of the Collegiate Church of Manchester, to which he was a generous benefactor, and where on his death, in 1515, he was interred in the beautiful chapel built by him on the north side of the choir. In the foundation of that chantry, in 1513, Sir John appears, by an inscription there placed with his arms impaling those of Honford, to have taken part. Sir John Stanley was twice married, first to Elizabeth, heiress of Sir John Harrington, of Hornby Castle, by whom he had three daughters. By his second wife, Margaret, only daughter and heiress of William Honford, Esq., of Honford, now called Handforth, near Cheadle, Cheshire, he left a son, John Stanley, of the age of three years only at the date of the subjoined document, and who died in early age in the life of his mother.¹ The disposition made by Sir John Stanley, of his extensive property, and the provision for the education of his young son, under the care of the Abbess of Barking, until he should attain to the age of twelve years, and from that time, "under the custodye and guydinge" of the Abbot of West-

¹ Ormerod, Hist. Cheshire, vol. iii. p. 326.

minster, evince a remarkable degree of forethought and parental solicitude. Although designated his last Will and Testament, this instrument may more properly be described as a Settlement, and Declaration of Trusts. It was, moreover, executed under peculiar circumstances. About the year 1523 Sir John Stanley became involved in a dispute with his neighbours, the Leghs of Adlington; they found means to gain the favor of Cardinal Wolsey, and Sir John was in consequence imprisoned in the Fleet, until he was compelled to forego the ground of the quarrel.² This arbitrary act of power may have been the cause that embittered his peace of mind, and ultimately led him to withdraw from the vanities of the world and the trials of human life. A few months subsequently to the date of his will, here printed, he obtained from the Abbot and Convent of Westminster, a grant of fraternity in favor of himself, of Dame Margaret, his wife, their son and heir, and Anne Stanley their sister, with the customary privileges of participation in the prayers of that monastery, "in vita pariter et in morte," and in all other places of the order through England, and that their names should be enrolled in the Martyrology, "post obitum." The original grant, as stated by the historian of Cheshire, is preserved among the evidences of Lord de Tabley, at Tabley; it is beautifully enriched with heraldic bearings and illuminated decorations.³ It bears date January 5, 1527 (*i. e.* 1527-28).

So great, however, was the mortification sustained by Sir John Stanley through the oppressive act of Wolsey, that, as Lord Herbert relates, "upon displeasure taken in his heart he made himself monk in Westminster, and there died."⁴ Amongst the muniments of that great Benedictine house his will has been preserved, and was recently brought to light by Mr. Burt. We acknowledge, with gratification, the courtesy and kind permission of the Dean and Chapter, that have enabled us to place before our readers a document of considerable interest in connection with the history of the Stanleys. In the same repository has also been found a remarkable instrument relating to Sir John Stanley, that we hope on an early occasion to place before our readers. It is the record of the solemn act of separation between Sir John and Dame Margaret, his wife, with the mutual desire and intention "to make a lawfull vowe to summe approved religion," being doubtless an indispensable preliminary to the fulfilment of his determination to take the vows in the monastery at Westminster. This dissolution of the marriage bond was made with the greatest formality, in the sacristy of St. Paul's, London, before the Commissary of the Cardinal Legate, Wolsey, specially deputed for the occasion, and in the presence of numerous witnesses. The document bears date June 25, 1528, being somewhat less than six months subsequent to the Grant of Fraternity, made to Sir John Stanley by the Abbot and Convent of Westminster, as before mentioned.

We are indebted to the wonted kindness of Mr. Smirke for the subjoined abstract of the will of Sir John Stanley, and also for some observations on its form and structure.

A. W.

² Herbert, *Hist. of Henry VIII.*, p. 300, ed. 1672.

³ Ormerod, *ut supra*, vol. iii. p. 326, note.

⁴ In the Honford Pedigree, Ormerod, *ut supra*, p. 327, 1527 is given as the date

of the decease of Sir John Stanley, as shewn by *Inqu. post mortem*, 5 Edw. VI., 1547. This reference has been verified. There is a writ of extent, but no inquisition of this date.

Having carefully read the accompanying instrument, which our friend Mr. Burt has contributed to our "original documents," I think that some of our readers may be glad to accept the following as a condensed abstract of it :—

In substance, it contains the last will of Sir John Stanley, at the time when he and his wife were in contemplation of a retreat from civil life into separate religious houses by consent of both parties. Sir John Stanley, the testator, afterwards became a monk professed in the Abbey of Westminster. The act was accompanied with a formal species of divorce "*a mensâ et thoro*," which is recorded in the same repository as the will itself. This document which has there recently been found by Mr. Burt, is of unusual character, and we hope, by the courteous permission of the Dean and Chapter, to place it before our readers on a future occasion.

The instrument now under consideration begins by referring to a previous indenture or deed of covenant. The parties to this last deed were Sir John Stanley and his wife Margaret, Dame Kateryne Maynwairng, and Edmond Trafford. The son and heir in tail at this time is therein stated to be of the age of three years. The date of the recited deed is stated to be February 12, 17 Hen. VIII (1526). The covenants in it are not specified. The provisions of the will during the nonage of the heir, are the following :—

That the Warden, Vicars, and Roves of the College Church of Manchester, for the time being, during such nonage and after they have "received" the will, shall levy and receive all the rents of the premises, according to a rental annexed, to the uses following :

To deposit the same in a "sure coffer" with two locks, in the College, and distribute them thus :

1. To pay £4 yearly to Sir John Bryddocke, priest, for singing daily mass at the altar of the new chapel of St. John the Baptist, for the souls of James Stanley, late Bishop of Ely, of Sir John and his wife, and their heirs and ancestors, and of William Honford, Ellen, and Anne, and for all Christian souls.

Also £7 yearly, and every week on Friday, for alms to seven poor people, in penny doles in the same chapel.

Also 40s. on Good Friday yearly in Lent for alms for such poor people.

Also to pay a debt due to the king for "conduct" and "preste" money, £41 5s. 4d., and £23 12s. 6d. due to the Prior of St. Oswald's Hostel, Yorkshire, for a debt due from the late Bishop of Ely to him.

To lay up yearly £25 during nonage, until the savings shall amount to £250, for the purchase of lands of the clear yearly value of £10, within fifteen years after the receipt of the will, to these uses, viz. : to pay £5 to the priest for life for masses, as above, in lieu of £4 ; and after his death another chantry priest is to be named by his, Sir John Stanley's, heirs. Then follow further provisions for such chantry, and for payment of the Warden, vicars, deacons, choristers, clerks, and belmane, rateably for a yearly obit, and also a mass for the same souls as before-mentioned. The repair of the same "new chapel" is also provided for, as well as a payment to the Prior and Convent of Ely Cathedral, for purchase of lands, &c., and for an obit there, and mass annually for the same souls already mentioned. In default of performance of these directions by the Warden, &c.,

of Manchester College, the heirs of Stanley may enter and execute the uses of the will.

If the purchase of land, as directed, cannot be effected within fifteen years, the Warden, &c., are to invest the money in a yearly rent in fee to be bought of the merchants of the Staple of Calais, at the rate of thirty years' purchase, so as to make up the yearly value of £10.

The wardens are to pay, during nonage, the sum of £15 yearly to the Abbess and Convent of Barking, in pursuance of an agreement in writing between them and Sir John, and £10 yearly to the Abbot and Convent of Westminster, in pursuance of a like agreement with him and that convent. After the decease of Sir John and his wife, his heir is to be in the wardship and keeping of the Abbess of Barking till the age of twelve, and then in the custody and guidance of the Abbot of Westminster until his full age. The marriage of the heir before the age of twenty is not sanctioned by Sir John, but after that he is to choose his own wife, advising with the Abbot and Edmond Trafford, and to have the profit of the "marriage money" to his own use.

The will contains some further bequests to household servants, &c., to the churches of Manchester, Chedyll, and Ashton; outstanding farms are to be re-let without fine or other exaction, and it concludes by requesting the Bishop of London, the Earl of Derby, Lord Delaware, the Abbot of Westminster, Edmond Trafford, Sir Alexander Ratclyffe, Knt., and his own son and heir, to be supervisors for assisting in the execution of the will.

The will was both sealed and signed by Sir John, the maker of it. Date, 30 June, 1527.

This instrument differs from ordinary wills in this respect, namely, that its operation is not deferred till the death of the maker of it, but purports to take effect "immediately after the receipt of these presents by the Warden, &c., of the College Church of Manchester." The date of the will preceded the abolition of Uses by the Act of 27 Hen. VIII. c. 10, by means of which wills of land had been, in fact, often made long before the earliest statute (32 Hen. VIII. c. 1) for distinctly authorising such wills of land had been passed. We must therefore look at the will of Sir John Stanley as a declaration of *uses*, rather than a strict will in the present sense of the word.

Long before this date it was familiar law that a monk professed was, for civil purposes, dead, and that if he intended to protect himself or his family from the necessary consequences of such civil death, he must make some provision by will, or by an instrument operating *inter vivos*.

This was, no doubt, the object of the testator in the present case, and for this purpose a family settlement by indenture and covenants had shortly before been executed by himself and wife, and two other trustees. This last mentioned document is not forthcoming.

The main object of the will was to provide for the support and education of his son, then an infant of tender age, during his infancy and non-age. Provisions more immediately affecting the wife will probably be found in the antecedent deed of covenants already referred to. Another and very prominent object was to provide for the spiritual welfare of Sir John's putative father, the Bishop of Ely, and of the past, present, and future members of Sir John's family. Hence the large provision for

masses, obits, and charitable distributions among the poor in the New Chapel at Manchester, and in the Cathedral Church of Ely.

A few other observations occur to me on this will, as deserving notice.

In the event of the inability of the trustees to invest in the purchase of land, they are directed to purchase a commercial security from the merchants of the Staple of Calais; consols being in those days unknown, and railway debentures being the discovery of a future century.

We find mention of no fewer than four persons, learned in the law, to whom retainers had already been given in the form, familiar in our law books, of a pension or annuity "pro consilio impendendo," so that the son and heir might never be without legal help in case of need. I think it may be safely conjectured that, in the construction of so complex a will made by a moribund monk-designate, these salaries are not likely to have turned out to be sinecures.

The reservation of what is called "marriage money" to the son's sole use, refers to the feudal due of "maritagium," well known as incidental to certain old tenures then in full force.

The wardens and other officers of the College Church at Manchester, were, in effect, general executors and trustees of the will, and, in certain events and cases, Edmond Trafford was to be substituted; and no fewer than five others, specially named, are added as supervisors in the execution of the trust. A "supervisor" is a name still current in the Probate Courts, but rarely now appointed. It would be curious to know how the young gentleman, so carefully provided with so large a staff of legal and spiritual advisers, turned out when he attained his full age, if he ever did.

I should mention that this will is not the original one, but a notarial certificate. Practically, such a certificate may be relied upon as an authentic copy, whatever its legal effect may have been as judicial proof.

E. S.

In Dei nomine, Amen. This is the laste Wylle of me, Sir John Stanley, of Honford, knyght, in this my writynge indentid under my scale declared and speeyfied concernynge the disposicyon of all the manours, mesuages, burgages, landes, tenementes, rentes, commodites, revercyons, and services, with theyr appurtenaunces, in Honford, Bosden, Asheton, Sale, Altryngham, Badeley, Fadeley, Torkynton, Burlond, Bromley, Stoke, Yarton, Buglawton, Holmewalfeld and Hawkeslegh, within the Forest of Maxfeld, with thavouson of the Church of Ashton afforsayd, in the Countye of Chestur, off the wheche sayd manours, mesuayges, burgages, landes, tenementes and other the premysses, and of the rentes, proffites and revenues thereof commynge and growynge, and also of all other manours, landes and tenementes now beyng in revercyone to Dame Margaret, wyffe unto me the forsaid Sir John Stanley, I, the said Sir John Stanley, maye lawfullye therof and of all other the premysses make and declare my laste Wille, duryng the nonnaige of the heire apparant of me the said Sir John Stanley and of the said Dame Margaret my wiffe, of our bodies lawfully commynge, accordynge to the covenantes, grauntes, and agrementes made betwene me the said Sir John Stanley and the said Dame Margaret my wiffe, on the one and firste partie, and Dame Kateryne Maynwairynge, widowe, on the seconde partye, and Edmond Trafford of Trafford, Esquier, on the thyrde partye,

by Indentures triperbyte therof made betwyxte us, berynge date the xijth daye of February in the xvijth yere of the Reigne of Kyng Henry the vijth, in manour and forme as in the same Indentures more at large it is declared, specyfied and conteyned. Fyrste, I, the said Sir John Stanley, by this my Will declare and ordeigne, that the Warden, Vicaries, and Reves of the Colledge Church of Mainchestur in the Countye of Lancastur, and their successours for the tyme beyng, immediatly after they have recyvyd this present Wille, duryng the nonayge of John Stanley the yonger, sone and heyre of the bodyes of me the said Sir John Stanley and Dame Mergaret my wyffe lawfully begotten, beyng of thayge of thre yeres at the makynge of this present Wylle, shall have, take, levey and perceyve all rentes, profittes and revenues of the sayd manours, mesuages, burgages, landes, tenementes, and other the premysses, accordynge to the yerlye valew therof, which yerlye valewe therof is esteemed to be as it apperethe in a Rentale to thys my Wylle annexed, to this use and intente that the same rentes, profittes and revenues by the said Warden, Vicaries and Reves soo receyvid shalbe saffely layde up in a sure coffer, havynge tooe lockys therunto, within the said Colledge, and the said Wardene and Wycaries to have one keye therof in theyr custodye, and the said Reves for the tyme beyng to have an other keye therof in ther custodye, and then aswell the said Wardene, Vycaries and theyr successours, as the said Reves and theyr successours, to dystribute and paye yerlye of the said rentes, profittes and revenues in forme folowynge, that is to wete, Fyrste, To paye and delyver yerlye iiij^{li} of the said rentes, proffytes and revenues duryng the said nonayge unto Sir John Bryddoke, preiste, to thentent that he therfore shall synge masse daylye at the greate awlter within the newe Chapell of Sayntt John Baptiste uppon the North syde of the said Colledge Church of Mainchestur, and there to praye for the sowles of James Stanley, somtyme Bushope of Ely, of me the said Sir John Stanley, and Dame Mergaret my wyffe, oure heyres and auncestres, and for the sowles of William Honford, Elen and Anne, and for all Crysten sowles. Also I woll, that vij^d sterlyng of the said rentes, profittes and revenues shalbe every weke yerly uppon the Fryday, dystributed and gyven in almes by the said Warden, Vicaries and Reves to vij dyverse poore pepull in peny dole, within the said newe Chapell, duryng and by all the tyme of the said nonayge. Also I woll that xl^s of the said rentes, proffytes and revenues shalbe every Lent yerely uppon Good Fryday dystributed and gyven in almes by the said Warden, Vicaries and Reves to poore pepull in penye dolle, within the said newe Chapell and Church, duryng and by all the tyme of the said nonayge. Also wheare as I am indettyd unto the Kynges Grace for conduyt and preste money in the somme of xlj^{li} v^s iiij^d, and to the Prior of Sainct Oswoldes Nostell, in Yorkshyre, in the somme of xxij^{li} xij^s vj^d, for a dett which James Stanley late Bushop of Ely owght to the said Pryour, I will that the said Warden, Vicaries and Reves shall trewly content and paye of the said rentes, profittes and revenues, the said sommes unto the Kynges Grace and to the said Priour within a yere and a halffe nexte after the syght and receyvynge of this Wylle by the said Warden, Vicaries and Reves; and, when the said sommes be soo payd unto the Kynges Grace and to the said Pryour, then I woll that the said Warden, Vicaries and Reves shall from thensforth yerlye duryng the said nonayge ley up xxv^{li} of the said rentes, profittes and revenues by

it selfe in the said coffre within the said College, unto the tyme that the somme of ccl^{li} be saffely leyd in to the said coffre, with the which ccl^{li} I woll that the said Warden, Vicaries and Reves shall bye and pourchace landes and tenementes to the clere yerly valew of x^{li} over all charges, as shortly as they convenyently can fynd suche landes to be solde, soo that the said landes and tenementes of the clere yerly valew of x^{li} be boght and pourchassed wythin xv yeres next after the receyvynge of this Wylle by the said Warden, Vicaries and Reves, or theyr successours. And I woll that the said landes and tenementes of the clere yerly valew of x^{li} soo pourchassyd shalbe to thes uses and intentes, that is to saye, that v^{li} of the rentes and proffytes therof shalbe yerly to thuse and fyndynge of Sir John Bryddocke, preste, durynge his lyffe to synge masse as is abovesaid, and then the said payment of iiij^{li} to hym to be payd, as it is afforsaid, to ceyse and not to be payd, and after hys discease yerly for ever to thuse of an able chaunntre preste to synge masse dayly at the greate awlter within the sayd newe Chapell at Mainchestur afforsaid, and ther for ever to praye for the sowles above rehersed in this Will. And I woll that myn heyres of my bodye lawfully commynge shall alwaye have the nomynacyone of the said chaunntre preste soo to be fownded; and, for deffaute of such heyres, I woll that the sayd Warden and hys successours, and the sayd Edmond Trafforde and hys heyres, shall joyntlye for ever have the nomynacyon of the said Chaunntre preste, only to thuses and intentes before rehersed. Also whear ther is one Chaunntre of iiij^{li} yerly stablyshed and fownded by me the said Sir John Stanley for ever to endure to a Chaunntre preste within the said newe Chapell, and for as moche as the said iiij^{li} yerly is verey littell for a Chaunntre preste to lyve theruppon, I woll therfor that landes of the clere yerly valewe of xx^s of the said landes of the yerly valewe of x^{li} soo to be pourchassyd, as is afforsaid, shall yerly for ever goo and be to thuse of the said Chaunntre and to the augmentacyone therof, to thentent that the Chaunntre preste therof shall yerly have and take a c^s with the said iiij^{li}. Also I woll that landes and tenementes of the clere yerly valewe of xxx^s of the said landes of the yerly valewe of x^{li} soo to be pourchassed shalbe to this use and intent, that the rentes, proffites and revenues therof shall yerlye for ever be dystributed and gyven amonges the sayd Warden, Vycaries, Decons, Querestours, Clerkes and Belmanne, officers of the said College Church, and theyr successours, to be ratyd and payd to theym indyfferently after theyr aunycient custume in suche case usyd, and they to kepe therfore yerly for ever a solempne Obyt within the said newe Chapell, the Mondaye next after the daye of the Concepcyon of our Lady Saynet Marye, and a solempne Masse on the morowe nexte folowyng, and theratte to praye for the sowles before rehersed. And if it happen the said Warden, or eny of the said Vicaries, Decons, Querestours, Clerkes or other officers of the said College Church, at eny time to be absent and not present at the said Obyte or Masse, then I woll that all suche sommes and perceles of money of the sayd landes and tenementes of the yerly valewe of xxx^s, soo pourchassed, as shuld be dystributed and gyven amonges theym soo beyng absent from the sayd Obyte or Masse, shalbe distributed and gyven to the tooe Chaunntre prestes within the said newe Chapell, as ofte and at every tyme as suche defawte in beyng absent is made by theym, as is afforsaid. Also I woll

that landes and tenementes of the clere yerly valewe of xxx^s of the sayd landes of the yerly valewe of xl^{li} soo to be pourchassed, as is afforsaid, shalbe to this use and intent, that the rentes, proffytes and revenues theroffe shall by the said Warden, Vycaries, Reves and theyr successours yerely for ever be dystributyd and gyven in almes every Lent, on Good Fryday, to poore pepull in peny dolle within the sayd newe Chapell and Church, to pray for the sowles before rehersyd. Also I woll that landes and tenementes of the clere yerly valewe of xx^s of the said landes soo to be pourchassed, and the rentes, proffyttes and revenues therof, shall yerly goo and be to thentent and use that the said newe Chapell shalbe therewith for ever upholde and maynteyned and sufficiently repayed, and to fynd to the sayd Chapell ornamentes and all other thynges necessare, as nede shall requyre, alwayes herafter, by the oversyght and appoyntment of myn heyres afforsaid and of the sayd Warden, Vycaries and Churche Reves and theyr successours. Also I woll that the sayd Warden, Vycaries, Reves and theyr successours shall delyver and paye of the said rentes, proffytes, and revenues of the forsaid manours, landes and tenementes in the prymes* of thys Wyll specyfyed, to the Pryor and Convent of the Cathedrall Churche of Ely or to theyr successours L^{li} sterlynge, within vij yeres next after the receyvyng of this Wyll by the said Warden, Vycaries, Reves or theyr successours, and the said Pryor and Convent or their successours with the sayd L^{li} shall purchase landes and tenementes to the clere yerly valewe of xl^s; and the rentes, proffytes, and revenues therof shall yerly goo and be, and also made sure by the lawe to the sayd Pryor and Convent, and to their successours for ever, to be ratyd and dystributyd amonges theym yerly aftur theyr auneynt custume in suche case usyd, and they to kepe therfor yerly for ever a solempne Obyte in the said Cathedrall Churche of Ely, the Monday next before the daye and Feeste of the Annuncyacyon of Our Ladye Sayncte Marye, or within three dayes therof, and a solempne Masse on the morowe nexte folowyng, and theratt to praye for the sowles before rehersyd, and for all Crysten sowles; and the sayd Pryor or hys successours to purchase the same landes and tenementes within the space of vij yeres nexte after they have receyved the sayd L^{li}. And yf it happen that the said landes and tenementes of the clere yerly valewe of xl^s can not be boght and pourchassyd within the sayd terme of vij yeres by the sayd Pryor or his successours, as is afforsaid, then I woll that the sayd somme of L^{li} shalbe yerly payd and dystributed to the uses and intentes above specyfyed, in manour and forme as the rentes, proffytes and revenues of the same landes and tenementes of the sayd yerly valewe of xl^s shuld have bene dystributed, as longe as the said L^{li} wyll endure and streche. And I woll that the sayd Warden, Vycaries and Reves, or their successours, at the delyvere of the said L^{li} shall take a sure and sufficient bonde of the sayd Pryor and Convent, or of their successours, under their Convent seale in wrytyng, of the somme of a C^{li}, to performe and fullfyll the same in everye condycion accordyng to the trew intent of thys Wyll. Also I woll that the said Warden, Vycaries and Reves, or their successours, shall endever theyme to see that the sayd landes and

* The phrase "prymes of this Wyll" occurring here, and repeatedly in the context, must be only the same as "premysses," as written in the earlier part of

the document; possibly only that word contracted. It is indeed so contracted by conveyancers at the present time.

tenementes of the said clere yerly valewe of x^{li} soo to be pourchassyd, as is afforsaid, be made sure in the tytyll therof by the lawe as lernyd Councell by theym appoynted shall devyse it to be made by Fyne, Feoffament, Release, Recoverye, or otherwyse, to the uses and intentes above rehersyd, accordynge to the trew intent of this Wyll, the costes and charges in the lawe of the same suertye to be made to ryse, growe and be of the forsaid rentes, proffytes and revenues of the sayd manours, landes and tenementes, in the prymes of this Wyll specyfyed, in maner as hereafter it is declaryd and specyfyed. Also I woll, that yf the sayd Warden, Vycaries or theyr successours do not observe, kepe and performe all and every artycle and condicyon on theyre partye and behalffe, to be observyd and kepte in maner and forme, as it is before rehersyd concernynge the landes and tenementes of the sayd clere yerly valewe x^{li} soo to be pourchassed, and of the rentes, proffytes and revenues therof commynge, that then, upon defawte therof made, it shalbe lawfull to the heyres of the bodeye of me the sayd Sir John Stanley to entre in to the same landes and tenementes of the sayd yerly valewe of x^{li} soo pourchassed, and theym to possede and have, onlye to thuses and intentes before rehersyd; or elles, yf it shall happen me the sayd Sir John Stanley to have none heyre ne heyres of my bodeye lawfully begotten, that then upon suche defawte made in maner, as it is before rehersyd, by the sayd Warden, Vycaries or theyr successours, it shalbe lawfull to the forsaid Edmond Trafford and Sir Alexaunder Rattelyffe of Hordesall, knight, and theyr heyres, to enter in to the sayd landes and tenementes of the sayd yerly valewe of x^{li} soo pourchassed, and theym to possede and have for ever, onlye to thuses and intentes beffore rehersyd. Also I woll that incontinent after all the landes and tenementes of the sayd yerly valewe of x^{li} be pourchassyd, establyshed and made sure by the lawe, as it is afforsaid, to the uses and intentes above rehersed, that then, within a moneth, nexte after suche suertye is therof made, the said Warden, Vicaries and Reves, or theyr successours, shall of the said rentes, proffytes and revenues of the forsaid manours, landes and tenementes in the prymes of thys Wyll specyfyed, content and paye unto the forsaid Edmond Trafford xx^{li} sterlynge, for hys payne and labour takyne to see this my Wyll fullfylled and observed in everye thyng, and to be assistant and helpynge at all tymes to the same. Also I woll that the sayd Warden, Vycares and Reves, or their successours, after all the said landes and tenementes of the sayd yerly valewe of x^{li} be soo pourchassed and made sure by the lawe, as it is afforsaid, to the uses and intentes above rehersyd, that then within the sayd space of a moneth next after suche suertye is therof made, shall of the sayd rentes, proffytes and revenues of the forsaid manours, landes and tenementes, in the primez of this Wyll specyfyed, take and receyve xx^{li} sterlynge to their owne uses, to be distrybuted emonges theym ratably after theyr behavours, in resonnable maner, for theyr paynes and labours in this behalffe takyn, and to thentent to see this my Wyll observyd and fullfyllyd in every thyng. Also I woll, yf it fortune that landes and tenementes of the sayd yerly valewe of x^{li} can not be fully pourchassyd within the said space of xv yeres, that then the sayd Warden, Vycaries, and Reves or theyr successours shall with the resydewe of the sayd CCL^{li} and with more of the sayd rentes, proffytes and revenues of the sayd manours, landes and tenementes in the primes of this Wyll specyfyed, as nede shall

requyre, purchasse an yerly rent in fee of the Marchauntes of the Staple of Caley, after xxx^{li} yeres purchasse more or lesse, as it can be hade and opteyned, to make and fullfyll the sayd yerly valewe of x^{li} soo to be purchassed, and the same yerly rent to be made sure by thadvise of lernyd Councell, onely to thusen and intentes above rehersyd ; and if it fortune that the sayd yerelye rent canne not be soo purchassyd, ne opteyned of the sayd Marchauntes, ne landes and tenementes to the sayd clere yerly valewe of x^{li}, as is afforsayd, then I woll that the resydewe of the sayde CCL^{li} remeynyng at the sayd xv yeres ende, which shuld have goone to the purchassyng and opteygnyng of the said landes or rentes of the said yerly valewe of x^{li} soo unpurchassid, shalbe yerly payd and distrybuted to the same uses and intentes above specyfyed, in maner and forme as the rentes, proffytes and revenues of the same landes and rentes of the sayd yerly valewe of x^{li} shuld have bene distrybutyd, as longe as the resydewe of the sayd CCL^{li} soo remaynyng wyll endure and streche. Also I woll, that iij^{li} sterlyng of the rentes, proffittes and revenues of the manours, landes and tenementes in the primes of this Wyll specyfyed shall yerly be kepte and layde in a sure place within the sayd College, as is afforsayd, to and for the costes and charges to be spent in the lawe to make the sayde landes and tenementes of the sayd yerly valewe of x^{li} soo to be purchassyd, as it is aforesaid, sure and lawfull to the uses and intentes above rehersyd, and to and for the defence and other costes resonnable, aswell of and for the same landes and reparacyons of the same, as of and for the deffence and reparacyons and other costes resonnable of the sayd manours, landes and tenementes in the primez of this Will specyfyed, as nede shall requyre, at any tyme hereafter, by the good oversyght of the said Edmond Trafford and his heyres. Also I woll, that the said Warden, Vycares and Reves, or their successours, shall content and paye of the rentes, proffites and revenues of the forsaid manours, landes and tenementes in the prymes of this Wyll specyfyed xv^{li} sterlyng yerely duryng the sayd nonnayge at the Feestes of the Natyvite of Sayncte John Baptyste and Saynte Marten in Wynter, by evyn porcyons, to the Abbes and Convent of the Nonnere and Monasterye of Barckynge, or to theyr successours, for performance of suche couvenauntes and agrementes as be contayned in wrytyng made betwene the sayd Abbes and Convente, and me the sayd Sir John Stanley. Also I woll that the sayd Wardene, Vycaires and Reves, or theyr successours, shall content and paye of the rentes, proffyttes and revenues of the forsaid manours, landes and tenementes in the primez of this Wyll specyfyed x^{li} sterlyng yerly, duryng the sayd nonnayge, at the said Feestes of the Natyvite of Sayncte John Baptyste and Saynct Marten in Wynter, by evyn porcyons, to thabbot and Convent of the Monasterye of Westmynster, or to their successours, for performance of such couvenauntes and agrementes as be conteyned in wrytyng made betwene the sayd Abbot and Convent, and me the sayd Sir John Stanley. Also I woll, that after the discease of me the said Sir John, and of Dame Margaret my wyffe, the forsaid Edmonde Trafford shall receyve and take all the rentes, proffytes and revenues of the manour of Ashton uppon Mercey Banke, whych is esteemed to be of the yerly valewe of xl^{li}, to the onely use and fyndyng of my said sonne and heyre apparaunte, tyll he comme and be of the full ayge of xxj^{ti} yeres ; and I woll that my sayd sonne and heyre shalbe in the custodye and kepyng of the said Abbes of Barckynge, tyll he accom-

plyshe and be of thayge of xij yerres, and after the sayd ayge of xij yerres, I woll that he shalbe in the custodye and gudyngge of the sayd Abbot of Westmynster, tyll he come and be of hys full ayge of xxj^{ti} yerres. Also I woll that the sayd Edmond Trafford, or hys heyres, after the disease of me the sayd Sir John and Dame Margaret my wyffe, shall content and paye of the rentes, proffytes and revenues of the sayd Maner of Ashton xx^{li} yerly, duryngge the sayd nonayge, at the said Feestes of the Natyuite of Saynet John Baptyste, and Saynet Marten in Wynter, by evyn porcyons, to the sayd Abbes of Barckynge, and to the sayd Abbot of Westmynstur, or to theyr successours, to fynde my sayd sonne and heyre and hys servauntes meyte, drynke and wayges convenyent, and all other thynges necessare un to theym, duryngge and by all the tyme that he shalbe in the rule and gudyngge of the sayd Abbess and of the sayd Abbot, as it is afforsayd. And I woll that in the meane seasson, immediatly after the forsaid sommes be payd unto the Kynges Grace, and to the sayd Pryour of Sayncte Oswoldes, as is afforsayd, the sayd Warden, Vycaryes and Reves shall content and paye of the rentes, proffytes and revenues of the sayd manor of Ashtone xx^{li} yerly at the sayd Feestes, by evyn porcyons, unto the sayd Abbess and Abbot for the fyndyngge of my sayd sonne and heyr and his servauntes, as is afforsaid. Also I woll, that all the resydewe of the rentes, proffytes and revenues of the sayd manour of Ashton, over and besydes the charges above rehersyd remeynyngge after the disease of me the said Sir John and Dame Margaret my wyffe, shalbe delyveryd and payd by the sayd Edmond Trafford or his heyres, unto my sayd sonne and heyre when he shall come and be at his full ayge of xxj^{ti} yerres, to have to hys owne propre use. And I woll that my sayd sonne and heyre shall not be maryed tyll he comme and be of the ayge of xx^{ti} yerres, and then, yf he be mynded to marye, I woll that he shall chose his wyffe hymselfe, by the good advyce and counsell of the sayd Abbot of Westmynstur and of the sayd Edmond Trafford, and I woll that he shall have all the proffyte of his maryage money to hys owne use, to be to hym delyveryd at hys full ayge of xxj^{ti} yerres. And wheare as the sayd Edmond Trafford hathe an yerly fee or pencoyne of xl^s goynge owte of the landes and tenementes in Honford afforsayd, to thentent to see this my Wyll fullfyllid and kepte in every thyngge, I wool that he soo dooyngge shall have and enjoye the sayd yerly pencoyne of xl^s, accordyngge to hys patent thereof made. Also I woll that the sayd Warden, Vicaries and Reves yerlye, duryngge the said nonnayge, shall trewly content and paye of the rentes, proffytes and revenues of the forsaid manours, landes and tenementes, in the prymes of this Wyll specyfyed, unto Kyrstoner Ashley xxvj^s viij^d, to Thomas Hunnte xx^s, to Roberte Delahaye xij^s iiij^d, to Roger Cooke xij^s iiij^d, to Gyles Halywall xij^s iiij^d, somme tyme my howsholde servauntes. Also, wheare as Thomas Sneyd, lernyd in the lawe, and Roger Leegh have ether of theym an yerly fee or pencyon of me, the sayd Sir John Stanley, of xxvj^s viij^d, and wheare also George Kegn of Mainchesur hath an yerly fee or pencoyne of xx^s, and also wheare as Geffraye Browne hath an yerly fee of vj^s viij^d, I woll that they and every of theym be trewly content and payd the sayd yerly fee or pencoyne, duryngge the nonayge of my sayd sonne and heyre, soo and upon condicyon that they and every of theym be aydyngge, helpyngge and assystyngge with

theyr best councell, labour and advice at any time when they or eny of theym shalbe resonably requyred by the sayd Warden, Vycares or Reves, or by the sayd Edmond Trafford, to and for the performyng and fullfyllinge of this my Wyll, accordyng to the trewe intent therof. Also I woll that the sayd Warden, Vycares and Reves shall paye yerly, duryng the sayd nonnayge, to Alexander Marten xx^s, to Anne Stanley syster unto me the sayd Sir John, or to her assignes, xx^s, to Mode Peers x^s, to Agnes Davye wydowe, xiiij^s iiij^d, to Ales Byrome xiiij^s iiij^d. Providet allwayes that the sayd Warden, Vycares and Reves shall yerlye paye the forsaid some of xv^{li} unto the sayd Dame Margaret Stanley, my wyffe, or to her assignes, duryng her lyffe, and also shall paye the forsaid somme of x^{li}, and the said somme of xx^{li}, of the rentes of Ashton afforsaid, unto me the said Sir John Stanley, or to myn assignes, duryng my lyffe, at the Feestes afforsayd, and, after our disceasses, then the sayd sommes to be payd in maner and forme, as it is above specyfyed, unto the sayd Abbesse and to the sayd Abbot accordyng to the trewe intent of thys Wyll. And I woll that all and every the paymentes above rehersyd, excepte the payment of L^{li} above specyfyed to the forsaid Pryour of Ely, shall begynne to be payd and dellyvered immedyatly after the receyvving of this Wyll by the said Warden, Vycares and Reves, or theyr successours, and the sayd paymentes from thensforthe to contynewe and be payd yerlye at the Feestes afforsayd, by evyn poreyons, duryng the said nonnayge, accordyng to the trewe menyng and intent of thys Wyll, as it is above specyfyed. Also I woll that after all and every of the premysse be observyd, kepte and performyd accordyng to this Wyll in maner beffore rehersyd, that then the resydewe and overplus of the rentes, proffytes and revenues of the sayd manours, landes, and tenementes specyfyed in the pymes of this Wyll remeynyng, shalbe by the sayd Warden, Vycares, and Reves, or by theyr successours, devyded in to iiij parties, and one parte therof to goo and be yerly to thuse of the sayd College Church and Newe Chapell of Mainchestur, and the second parte therof to be yerly to thuse of the Church of Chedyll in the Countye of Chestur, and the thyrd parte therof to goo and be yerly to thuse of the Church of Ashton afforsaid, and the fowrhte parte therof to be distrybuted yerly by the said Warden, Vycares and Reves every Lent on Goode Frydaye to poore pepull in peny dole, duryng the said nonnaige, within the said thre Churches, and they to praye for the sowles above rehersyd. And as to the reversyone of the forsaid manours, landes and tenementes in the pymes of this Wyll specyfyed, which shall comme and be to theires of me the said Sir John Stanley and Dame Margaret my wyffe lawfully commynge, after the dethe of Sybill Warren and Margery Holford, I woll that after the disease of the said Sibill and Margere, or eyther of theym, the rentes, proffytes and revenues of the same manours, landes and tenementes soo beyng in revercyone, excepte the landes and tenementes percell of the said maner of Ashton, shalbe yerly devyded by the said Warden, Vycares and Reves, or theire successours, in to fowre partyes, wherof one parte shalbe by theym distrybuted yerly to the uses of the said thre Churches, and the seconde parte therof yerly to be by the said Warden, Vycaryes and Reves distrybuted in almes to poore pepull every Lente on Good Frydaye, in peny dole, within the sayd thre Churches, and the thyrd parte therof yerly to be by the sayd Warden, Vycares and Reves gyven to

poore wydowes indyfferently to be-delyvered to theym by evyn porcyons, and the fowrhte parte therof yerly to be dystributed and gyffen by theym to poore maydens within the said thre Parysshes, durynge the sayd nonnayge egallye, soo that one of theym have noo more therof then a nother. Also I woll that all tenanntes and fermours that nowe be in possessyone or revercyone of the forsaid maners, landes and tenementes in the prymes of this Wyll specyfyed, which have taken eny howse or lande to ferme of me, the said Sir John Stanley, by lease, promyse or otherwyse duely proved, that they, and every of theym, shall have, holde, occupye and enjoye such landes and tenementes soo taken in ferme durynge theyr leases and grauntes withoute paynge of eny fyne or income. And I woll that the said Edmond Trafford after the dethe of every tenaunte or tenauntes of the said manours, landes and tenementes in the primez of this Wyll expressyd, shall appoynte newe tenaunntes without takynge of theym eny fyne or income. And I woll that the Reverende Fadere in God, Cuthberte Tunstall, Bushoppe of London, and Edward, Erle of Derbye, and Thomas, Lord la Ware, and John, Abbot of Westmynster, and the forsaid Edmond Trafford, Sir Alexander Ratclyffe, Knight, and my sayd sonne and heyre apparaunnte, and their heyres and successours, to be supervysours, ayders, helpers and assystentes, to and for the observynge, performance and executynge of this my last Wyll, accordynge to the trewe intente theroffe, in maner and forme as it is beffore declared and specyfyed, whom I require, and in the waye of charite desyre, to see that this my Wyll be performed and fullfyllid in every behalfe. In Witness of the premysses to eyther partye of this wrytynge indentyd, I the said Sir John Stanley have putt to my Seale. Yevin at Westmynstur, the xxxth daye of June, the Yere of oure Lord God, A. MCCCCXXVIJth.

[Signed] JOHN STANLEY, K. ✠

Endorsed. The last Wyll and Testament of Sir John Stanley of Honforde in the County of Chester, Knight.

Proceedings at Meetings of the Royal Archaeological Institute.

November 1, 1867.

The Very Rev. Canon Rock in the Chair.

ON opening the session, the chairman congratulated the members upon the new quarters in which the Institute found itself. Their present home was far superior to that lately occupied by them, and equal (if not superior) to any they had ever had. There were many discomforts and inconveniences about their late rooms which they would not experience in their new habitation, and they were settled there for many a long year he hoped. He trusted that their improved quarters would conduce to the usefulness of the Institute, and that their numbers would increase in a corresponding ratio with their much improved accommodation.

The late Annual Meeting at Kingston-upon-Hull had been exceedingly agreeable and interesting; and they had made many good friends, he believed, on the other side of the Humber. At Hull, the place of their next Annual Meeting had not been fixed; and it had only been decided at a late meeting of the Central Committee to visit Lancaster. He congratulated the meeting on the good array of objects sent for exhibition, which augured well for the prospects of the session.

Mr. J. YATES read the following copy of an original letter, which he exhibited from the Canton Papers belonging to the Royal Society. It was a letter from the officers of the Admiralty in reference to supplies of ammunition for a man-of-war in the year 1653, the year of the celebrated battle between Admiral Blake and Admiral Van Tromp. It had peculiarities of diction and spelling, upon which some comments were made.

"To our very loving friends the Officers of the Ordnance,

" These—

" Gentlemen,

" Having lately taken upp the Shipp Eagle alias Experience for the service of the State, being of burthen of 750 tuns or therabouts, and (by contract) the State is to find Powder and Shott, our desires are that you would take notice thereof, and cause a seasonable supply to be made and sent aboard the said shipp (over and above her owne proportion for a Merchant Voyage) to fitt her as a Mann of Warr, Being all at present from (this shipp compleites the 40 Sayle ordered to be taken up)

" Your very loving friends

" THO. SMITH.

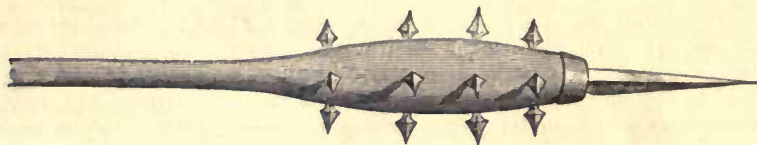
" ROB. THOMSON.

" 9th May, 1653."

Brigadier-General LEFROY, R.A., made some remarks upon the Arsenals in Switzerland, especially as regarded the acquisition by the Royal Artillery Museum at Woolwich of some specimens of "Morning Stars"

which were exhibited by him. These notices will be given in a more complete shape in a subsequent number of the Journal. It was at Berne that the General's attention was directed to the "Morning Stars," of which there were eighty-four specimens in the Arsenal; and, by the diplomacy of the Hon. Admiral Harris, Envoy from the Court of St. James', and through a suggestion by Mr. Albert Way, an exchange was negotiated with the Municipality of Berne, which resulted in his being enabled to exhibit the present specimens.

The weapon was a very formidable one, from its length and weight, when wielded by a powerful arm; and would be particularly serviceable in defending a breach or narrow pass; but, like all such weapons, it fell into disuse as fire-arms improved.



Morning Star, from the Arsenal at Berne: Royal Artillery Museum, Woolwich.

Many comments were called forth by this communication, and a hearty vote of thanks was unanimously passed to General Lefroy.

Mr. J. HEWITT gave some notices of an Effigy of one of the Stanley family in Lichfield Cathedral, to which the chairman appended certain interesting observations. These notes and observations are printed at length in the preceding volume of the Journal (vol. xxiv., p. 222).

Mr. SHURLOCK, of Chertsey, drew attention to a drawing of tiles representing the delivery of Magna Charta by King John to the Barons. These tiles were in the hall of a house at Felixstowe, Suffolk, and were said to have been purchased at Stowmarket about fifty years ago. They were considered by some antiquaries who had examined the drawing, to be remarkable as showing the first attempt to produce in any decorative pavement a pictorial representation of an historical subject. It had been thought that the tiles were probably of the fourteenth century.

Grave doubts were expressed upon this point by some present, it being even maintained that they were quite of modern manufacture. On this point we may perhaps be permitted to state, that we have received information apparently connecting the execution of these tiles with the designs for the rebuilding of the Palace of Westminster and Houses of Parliament after the great fire of 1834. A small exhibition of encaustic tiles and other decorative works was brought together, and afterwards scattered. Thirty years may have easily grown to fifty.

Antiquities and Works of Art Exhibited.

By Messrs. LAMBERT and RAWLINGS.—A small silver chalice and cover, xvi. cent., that formerly belonged to the parish church of Melinc, Pembrokeshire, as appears by an inscription of the period.—Four silver, or silver-gilt, chalices, of various dates, and with portions of modern work intermixed with the earlier. One of these was said to be the "Whitehall" cup, used in James the Second's Oratory.—A silver-mounted "Paper Jack Mug," of Edinburgh make, A.D. 1771-2.—A fine figure of

St. Vincent, of German workmanship, in silver, a reliquary of the fourteenth century.—A figure of St. Catherine (?) of the seventeenth century, also of silver.

By Captain PERCY SMITH, R.E.—A bronze Stirrup, of the Norman period, discovered in the Isle of Portland. See p. 58, *ante*.

By Brigadier-General LEFROY, R.A.—“Morning Stars” from the Arsenal of Berne, lately acquired by the Royal Artillery Museum, Woolwich.

The weapons, called by the Germans “Morgen-stern,” and in old English Inventories “holy-water sprinkles,” from a certain resemblance to the *aspergillum* used in churches, are comparatively rare in the armories in this country. One of the four specimens recently presented by the Swiss Government to the Woolwich Museum, is figured from a drawing that has been supplied by Mr. Hewitt, to whose kindness we are likewise indebted for the following notices of weapons of this peculiar class. The example here figured measures 7ft. in length; exclusive of the spike, 8 inches in length. The four-edged spikes around its head, are $1\frac{1}{2}$ in. in length. The staff or haft seems to be of ash.

“The Morning Star, in its simplest form, is, perhaps, the most ancient weapon in the world. The knotted club, furnished by the nearest forest bank, would be the readiest implement of offence offering itself to primeval man; and though easy of acquirement, its efficacy would not be the less fully appreciated. Thus we find in all parts of the world that people in a rude state of existence arm themselves with the club. The club, *pur et simple*, at first fulfils all their bellicose requirements; but soon the desire of improved aggression inspires some Asian or Polynesian Armstrong with the idea of arming the head of the club with spikes, of metal or sharks’ teeth, as the case may be. Thus we have at once, and in all quarters, the Morning Star; if not in name, at least in effect. An early pictorial example is found in that useful book, Rich’s ‘Companion to the Latin Dictionary and Greek Lexicon,’ page 173; where it appears as the weapon of Mars, from a fresco painting of Roman times; and in his notice of this form of ‘clava,’ the author refers to passages of Homer and Herodotus, where it is mentioned. This arm again appears with the statue attributed to the paladin Olivier at Verona. It is found, too, on a font at Wansford, Northamptonshire, seemingly a Norman work: this example is engraved at page 17 of Meyrick’s ‘Critical Inquiry,’ vol. i. In the Statutes of Arms of the 13th and 14th centuries, the name does not occur, but the weapon is probably included in the ‘arma minuta,’ assigned to the brigans and ribauds forming the mob of the army. In the 15th century we obtain figures of the spiked club, as in the ‘Nuremberg Chronicle,’ in Roy. MS., 18 E. V., folio 240; and in the picture of Martin Schongauer, engraved in Westwood’s ‘Paleographia.’ In the 16th century we have it delineated by Albert Durer, in the Ehrenpforte of the Emperor Maximilian; in Tewedannckh; in the plates of Schrenck von Notsing, and in Du Vigne’s ‘Vade-mecum du Peintre.’ In Küchler’s Pageant, exhibited on the marriage of Duke Frederic of Wurtemberg, in 1609, the spiked club is almost identical with the Woolwich specimens. See plate 18. In the Tower Survey of 1547 they are often mentioned; e.g.—‘Great holly water sprinckles, 118; Holly water sprinckles with gonnes in th’ende, 7; Little holly water sprinckles, 392; Holly water sprinckle with three gonnes in the topp, 1.’

The last-named is, without doubt, the club with iron spikes and short fire barrels still exhibited in the tower, with more or less of sensational additamenta relating to Henry VIII. Other examples are in the Tower, some probably of the heard named above. Sir Francis Vere, in his 'Commentaries,' speaks of 'Clubs, which we call Hercules-clubs, with heavy heads of wood and nails driven into the squares of them,' (page 170.) This was at the Siege of Ostend in 1601. Grose, in his 'Ancient Armour,' records that weapons having 'balls armed with spikes were long carried by the pioneers of the trained bands or city militia: they are generally called Morning Stars.' (p. 284.) The pioneers of the Honourable Artillery Company were also furnished with this implement. Numerous and excellent specimens of the analogous weapon of the South Sea tribes and their congeners will be found in the Christie Collection, so munificently bestowed upon our nation by the late Mr. Henry Christie."

By Mr. J. HEWITT.—Drawing of an Effigy of one of the Stanley family in Lichfield Cathedral. Engraved in this Journal, vol. xxiv. p. 222.

By Mr. SHURLOCK.—Drawing of Tiles representing King John delivering Magna Charta to the Barons, now at Felixstowe, Suffolk.

December 6, 1867.

Mr. O. S. MORGAN, M.P., and V.P., in the Chair.

A MEMOIR "On Mediæval Military Architecture," by Mr. G. T. Clark, F.S.A., was read. This has been printed in the preceding volume of the Journal, Vol. XXIV., p. 92.

The Rev. CANON SCARTH sent an account of the recent explorations at Silbury Hill, Wilts, which was read. These explorations were undertaken to endeavour to determine whether the Roman road ran under the hill or wound round it.

The Wilts Society are having plans and drawings made, and a detailed account of the late excavations will appear in a forthcoming number of their Journal. Though a member, Mr. Scarth was not often able to join in their proceedings, and was indebted to Mr. Wilkinson and Mr. Cunnington for being able to take part in their late interesting examination. He joined Mr. Wilkinson at Calne, and thence drove to Silbury Hill on 22nd October; Mr. Wilkinson, knowing well the country, carefully pointed out what he believed to be the direct line of the Roman road before they met the other investigators at the mound. They found excavations in progress on the eastern side of the hill, where two trenches had been dug, one a little north of the other in the direction in which it was thought the Roman road could be traced. The intention was to dig down till the old turf was found, following that to join the two trenches, and see if any trace of the Roman road existed between them. They soon found that the chalk had been excavated 10 or 12 feet below the original surface of the ground, and no turf or soil remained on the present surface of solid chalk. Mr. Fergusson infers from this that the hill was probably projected on a smaller scale, and afterwards made to cover the ground from which the material had been excavated. During the excavation, *rein-deer's* horns were found in the north portion, and in the south, 6 feet from the surface on the chalk, some wood ashes, and among them the blade of a knife, with a small whetstone beside it. After referring to

the examination of the hill by the Institute in 1849, when a tunnel was driven into the centre, and stag's antlers discovered, Mr. Scarth observed that the present examination of the hill is as nugatory as the past in revealing anything from which to infer the object of its construction, but the direction of the Roman road has been ascertained beyond doubt. The question whether the Roman road passed underneath the hill is set at rest for ever, the line of the road having now been laid open, and its true direction ascertained beyond doubt. Next morning he, with Mr. Cunningham, set to work to lay out the line of the Roman road. There are always "indicia" to the practised eye—chiefly the different appearance of the crops and herbage. The largest flints also are a guide, as they have probably been dragged by the plough from the bed of the road. Aided by such "indicia," and having ascertained the exact point at which the road traversed the summit of the hill, they marked out the line which it was supposed to have taken through several fields; and then, having brought it near the mound at the point where it seemed to deflect, caused a section to be made about 35 to 40 yards from the mound itself. This section revealed the road and the ditches on each side. On the arrival of the main party, it was thought well to make other sections in the line that had been staked out (seven or eight trenches had been cut). These were made at intervals varying from 50 to 100 yards or further apart, and each section revealed the road and accompanying ditch on one or both sides. The first section was made very near the point where the Roman road unites with the turnpike road between Bath and Marlborough. The line marked in the Ordnance map is perfectly correct. The road did not run up to the hill or under it, but deflected before it approached the low ground upon which the hill is placed, and the present turnpike road marks its track some short way beyond Silbury.

Mr. Scarth would not enter on the question whether the hill or the road is oldest, but inclines to Mr. Wilkinson's view that the road was run direct for the hill. In his letter to the *Athenæum* (Nov. 9), he says, "The only perfectly straight portion of the Roman road over the downs is that which lies between West Down and the hill itself." Mr. Wilkinson supposes the road to have been planned from Bath, and the work carried out in the same direction. The *Iter* (xiv. Antonine) begins with *Isca* (Caerleon) and ends with *Calleva* (Silchester), thus marking the distances in this same direction from west to east. Little is known about Roman engineering; no work of antiquity treats of it. He referred to Statius, Vegetius, and Reynolds' *Itinerary of Antonine*, as giving the best idea of it. He thinks it may be inferred that great pains were taken in the planning of roads and stations; these having been carefully fixed on, connecting roads soon followed as a matter of course, and these were planned with as much care as in the present day. They evince the greatest skill and knowledge of the art of road-making.

Mr. Scarth wished that a systematic examination of the Roman roads in the country, and a complete plan of Roman Britain should be made, showing all roads, camps and villas.

A note in Horsley's *Britannia Romana* in the Bath Library fixes the long-lost station *Verlucio* at Highfield, near Sandy Lane, 15 miles from Bath. Mr. Scarth hoped in the spring to trace that road from Bath to Silchester, and note some discoveries not yet put on record. That much is to be done is shown by what was found last month in Walcot parish, on the

north side of the Avon, where the Cleveland bridge unites the parishes of Walcot and Bathwick. Three interments were found there, two in cists, and one in a stone coffin; the cists were covered with one stone. With them were Roman pottery of various kinds. These interments were in the line of the Via Julia from Bath to Marlborough. He had that morning heard that another part of the frieze of the temple now in the library of the museum had been discovered. Also a fine memorial cross and memorial slabs used as a chimney-piece.

Mr. FERGOUSON added a few particulars to Mr. Scarth's account, but thought no fair discussion of the subject could be held without the plans that were in course of construction. He doubted the fact of the horn found being that of the rein-deer.

The CHAIRMAN, Mr. Fairless Barber, and Mr. Ouvry, added some observations on the subject.

Dr. Rock called the attention of the meeting to a beautiful pectoral cross and chain of gold, which were exhibited by the gracious permission of Her Majesty. The cross bears traces of enamel and the initials I N R I on the four limbs. It had been found at Clare Castle, Suffolk, in 1865, in the course of some railway excavations. See a full account of this most interesting relic by Mr. Albert Way, in the present volume of the Journal, p. 60.

The following Notes on certain examples of the Badge of a Crown, represented as worn on the left shoulder, in several sepulchral memorials of the fifteenth and sixteenth centuries, by Mr. Albert Way, were then read.



"I wish to invite the attention of members of the Institute to the occurrence, on sepulchral brasses of the Tudor period, of the badge of a crown, worn on the left shoulder, and to present to the Society an impression of an example that is preserved in the possession of the Society of Antiquaries at Somerset House. It has been suggested, I believe, that it may have been the distinctive livery of a Yeoman of the Crown, but the precise significance of the badge appears to remain somewhat doubtful. The small sepulchral brass (length $20\frac{1}{4}$ inches) in the collection of the Society of Antiquaries was found in the Thames, about 1849, and was presented by Mr. Hugh W. Diamond.¹ It will be seen by the woodcut that it represents a man in armour, of the fashion of the latter half of the fifteenth century, with elaborately curved and scalloped outlines, a skirt with small tassettes hanging over mail, a very broad sword inconveniently suspended in front; on the left shoulder there is a large open crown, around the neck is a narrow band, to which is attached a six-foiled ornament, possibly the rose,

¹ Proceedings Soc. Ant., vol. i. p. 317; vol. iv. p. 71. The Institute is indebted to the courtesy of the Society for the use of the woodcut given above.

which occurs, I believe, worn in like manner, on other sepulchral memorials of the period. The occurrence of the Crown-Badge was discussed by Mr. Bruce shortly after the presentation of this curious memorial. He enumerated five other brasses on which it is found, referring particularly to one at St. Neots, Huntingdonshire, as recorded by Gregory King in his Visitation of that county in 1684. This example commemorated Thomas Lynde, Yeoman of the Crown. Mr. Bruce, however, left the question in doubt whether the badge were exclusively that of a Yeoman of the Crown, or, generally, of a servant of the Sovereign.

"At a subsequent time Mr. Charles Spence, well known to many of our members as a diligent investigator of middle age relics, brought before the Society of Antiquaries a brass in Quethiock church, Cornwall, that portrays Roger Kingdon (who died 1471), with his wife and their numerous progeny. Amongst eleven sons are seen some in secular habit; one, in long-skirted close-fitting dress, has on the left shoulder an open crown ornamented with large fleurs-de-lys. Behind him stands another son, in the habit of a canon, wearing the *aumusse*. The figure with the crown may probably represent Edward Kingdon, one of the sons, as supposed, of the aforesaid Roger. He was an adherent of Edward IV., who on his accession conferred on him the office of bailiff of Surrey. A person of the same name occurs likewise in the Patent Rolls of the reign of Edward IV., in which Edward Kingdon is described as one of the Yeomen of the Crown.

"At East Wickham, in Kent, there exists a brass in memory of William Young, late Yeoman of the Guard, who died in 1568. In this example the badge is a full-blown rose, ensigned with a crown, and it seems to be embroidered on the middle of the breast, as still worn by the Yeomen of the Guard. A similar representation of a crowned rose thus worn on the dress occurs on a memorial of Thomas Noke, 1567, in Shottesbrooke church, Berks. There are to be seen examples of this badge at some other places; they are enumerated by the Rev. H. Haines, in his remarks on 'Professional Devices,' in the introduction to his Manual of Monumental Brasses, p. cxxvii., where may also be seen the effigy of an official with the crowned rose on his breast: it is the memorial of Robert Rampston, at Chingford, Essex; its date is 1585. A late example at Wingfield, Berks, Thomas Mountague, 1630, portrays him as holding a halberd. Mr. Haines describes these figures as memorials of 'Crown-keepers,' or Yeomen of the Crown, and his conclusion appears probable that the badge of the Yeomen of the Guard, first instituted by Henry VII., was an open crown affixed to the left shoulder; it may have been, as we should infer from the manner in which it is shown on the brass under consideration and some other specimens, an object of metal plate; whereas in later times, when transferred to the breast, it was possibly only embroidered on the tunic. Such an appendage to the shoulder, projecting with angular ornaments almost against the cheek and ear of the wearer, must doubtless have been found very inconvenient, particularly in any fray or popular commotion, that might frequently occur when it was requisite to keep the loyalty of the lieges from too demonstrative a pressure on the suite of the Sovereign.

"There is so much interest in all questions that concern mediæval badges, devices, 'impresses,' as designated by Camden, and the like, that I offer no apology for inviting attention to the curious shoulder-orna-

ment that has suggested these observations. Mr. Bruce, whose opinion we would always cordially accept, appears to have regarded the badge projecting above the shoulder, and shown in the impression now offered for acceptance of the Institute, as essentially differing from the crowned rose on the breast. He was of opinion, therefore, that the meaning of the badge is still uncertain, and requested further information from collectors of sepulchral brasses."²

Mr. HEWITT exhibited some analogous examples of Crown-bearers from English and German monuments, and called attention to the fact that the costume of the British Yeomen of the Crown or Yeomen of the Guard was by no means uniform from reign to reign, as is so often affirmed at the present day, but followed the ordinary change of fashions from year to year. Thus the figure of a Yeoman of the Guard (exhibited) of Henry the VIII.'s time has the slashed garments and square-toed shoes of that day. In the brass of the Yeoman in Elizabeth's reign, at East Wickham, Kent, the slashes have disappeared, and the toes of the shoes are acutely pointed: a brass of 1630, at Winkfield, in Buckinghamshire, again differs; while the figure of a mounted Yeoman, given by Vischer in his "*Armatura Equestris*," has a tall hat with plume, a broad frill, great top boots, and is armed with a harquebus. Mr. Hewitt also called attention to the curious persistence in 1630 of the mediæval custom of portraying the principal personage of a group in exaggerated dimensions, as evidenced by the Winkfield brass. In that memorial it is recorded that the defunct "had lived almost 92 years, and had bene good part thereof a Yeoman of the Guard and a friende to the poore." He is represented as giving bread to a pair of needy applicants; but, while the charitable donor reaches to the top of the brass, the two casuals only attain to about half that altitude.

Several remarks were made upon this communication, the Chairman commenting at some length upon the material of which mediæval "brasses" are composed.

Mr. R. H. SODEN SMITH, F.S.A., drew attention to a remarkable bronze tripod caldron found at Yeavering Bell, Northumberland, the property of F. H. M. Sitwell, Esq., of Barmoor Castle, Northumberland, and exhibited by him.

"The bronze pot was ploughed up in 1860, and broken at the time. Yeavering Bell, upon which it was found, is a conical mountain more than 2000 ft. high, notable for various remains of antiquity, some of which have been referred to a Druidical period. Yeavering was also the residence of some of the Saxon kings of Northumbria, and here Paulinus is stated to have baptized converts in the river Glen close at hand.

"The pot is cast, and measures 12 in. high, 9½ in. in diameter, 6 in. across the lip; the legs are three, 6 in. high, cast with a raised rib in the centre of each, which, together with slight projections at the angle of each leg, serves to strengthen the attachment to the base of the vessel; there are two handles joining the rim or lip, through which hooks could be passed.

"There are 17 specimens of cast pots of various sizes and dates in the Museum of the Royal Irish Academy, all more or less resembling the present example; one of brass, with four legs, is dated 1640; and iron pots

² Proceedings Soc. Ant., vol. ii., p. 12.

of the same form, differing only in the length of the legs, are used in Scotland and Ireland now.

"In 1801 the Hon. Colonel Greville exhibited a brass hunting-pot at a meeting of the Society of Antiquaries; it is ornamented with the emblems of the Evangelists, and bears two inscriptions, one in Latin, the other in old French; it is carefully illustrated, with full details, in vol. xiv. p. 273, of the *Archæologia*, plates 51, 52 and 53.

"Dr. Wilson, in his *Prehistoric Annals of Scotland*, mentions several that would seem to be of the present type, as well as others of the caldron shape, rivetted, and of a very early, most probably pre-Roman, date; one of the latter was dug up in 1786 from the bottom of the peat moss of Kincardine.

"In the inventory of the goods of Ievan ap Kenric Vaghan, dated A.D. 1361, 36 Edward III., and printed in this *Journal*, is mention of four *ollæ*, which are considered to have been cooking pots, probably of the general character of that exhibited. Their occurrence in mediæval inventories is by no means rare. Dr. Bruce, in his account of the Roman Wall, mentions one found at Haydon Bridge. Mr. Albert Way also noticed a fine tripod caldron in Northumberland, which is now in the museum at Alnwick Castle. Sir John P. Boileau exhibited at a former meeting one found at Norwich. (*Arch. Jour.* vol. xxii. p. 91.) In January, 1863, the Hon. William Owen Stanley described one found at Bodidris, Denbighshire, and it is figured in our *Journal*, vol. xx. p. 169.

"The question of the date of Mr. Sitwell's vessel is interesting; the locality where it was found—a spot, apparently, of importance at a very remote time—seems to favour the supposition of an early date; the form, also, is doubtless one that has been in use for many ages; the workmanship does not seem to me beyond what could be accomplished by the metal workers who produced the finer types of bronze dagger-hafts and various horse-trappings or armlets, such as those I exhibited to the Institute on a former occasion. On the other hand, the bronze vessels of whose early date there can be little doubt, are rivetted caldrons and hammered vessels, not cast specimens like the present one; the bronze tripods with ornamented spouts, two of which are figured by Dr. Wilson in the *Prehistoric Annals*, though commonly called Roman, are considered by him to belong to an art different from Roman, and I should be inclined to refer them to the late Celtic period; they are also cast, and appear at least equal in workmanship to the pot now shown.

"Positive evidence is therefore wanting to carry the date of the present vessel beyond the mediæval time to which others of its general form undoubtedly belong, and the balance of present opinion among antiquaries is in favour of assigning to it a mediæval date."

Antiquities and Works of Art Exhibited.

By the CHAIRMAN.—Enamel miniature of Prince Charles Edward Stuart, the young Pretender; artist unknown.—Enamel miniature of King George III., when Prince of Wales, at eighteen years of age, dated 1755, by Gaetano Manini Milanese, as marked at the back. This artist is stated by Bryan and Edwards to have been born at Milan in 1730, to

have been an indifferent historical painter, and to have visited England in 1775. From this miniature it seems clear, however, that he was a painter of miniatures in enamel, and was in England in 1755.—Enamel snuff-box recording the victories of Frederick the Great at Rossbach and Lissa in 1757, with fine portrait of the king within the lid.—Two rings of *pietra dura* work in relief, made with precious stones, representing a temple of friendship; French work, time of Louis XV.—Hexagonal table clock, bearing the name B. Couldroit, beneath which is a *fleur-de-lys*; French work, date about 1540—1550.

By the Rev. R. P. COATES.—Photographs of early interments at Darenth, Kent. These were in illustration of further diggings in continuation of those brought to the notice of the Institute in the month of June, 1867, and of which some account is given in Arch. Jour. vol. xxiv. p. 281. The graves opened were about eleven in number, and in them were found a fine spear-head, a small axe-head, several knives, small bronze fibulæ, with one large and handsome belt clasp, bronze ornaments of knives and sheaths, many beautiful beads of glass and coloured pastes, a bronze hemispherical drinking cup without stem or handle, a large light-coloured earthen urn and two smaller urns, the smallest being of black clay, a large iron umbo of a shield and some small miscellaneous objects. The photographs showed a skeleton as it lay in the grave, with the larger urn at the right shoulder, the drinking cup at the left shoulder, and the small black urn at the feet.

By the Hon. W. O. STANLEY, M.P.—A stone grain-crusher, polishing stones and hones, and spindle-whorl, found in or near the hut circles on Holyhead Island. For a full account of these objects see the memoirs by Mr. Stanley and Mr. Albert Way, vol. xxiv. pp. 232, 250—252.

By Mrs. ALEXANDER KERR.—Original documents relating to the Manor of Froyle, Hants. This manor was a part of the possessions of St. Mary's, Winchester, and the documents exhibited comprised two accounts of the Lady "A." Abbess of St. Mary's, early in the thirteenth century; two accounts of the "Serviens et in parte firmarius" of the manor, temp. Richard II.;—Court Rolls, temp. Edward IV.;—accounts of the "Prepositus" and other officers, temp. Edward III. and Richard II. These had been handed over to the purchaser of the manor at the Dissolution, and they have, since their exhibition at the Institute, been acquired by the British Museum.

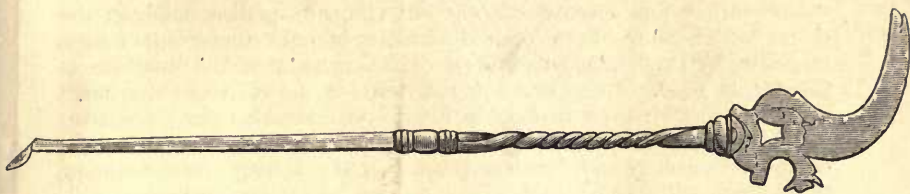
Mrs. Kerr also brought with the Froyle documents a lease of a wharf at Deptford, to which the autograph of John Evelyn is attached.

By the Rev. J. BECK, F.S.A.—A pendant and two beads of pure gold, elaborately ornamented with filagree, forming part of a necklace.—Two gold studs, also ornamented with filagree. They are of early Scandinavian work. These objects were ploughed up in the neighbourhood of Copenhagen, in the autumn of 1866, by a peasant, and purchased by Mr. Beck a few days after the find.—A gold tore ring, of an unusual type, found in the Island of Gottland in 1866.

By Mr. SHOUR.—Photographs of ornaments at Yeovil church, Somerset, and the remains of what seemed to have been a mason's rule, which had been found in the stone-work of the south-west angle of the tower of that church, a work of the fourteenth century; also a small iron ladle found there.

By PROFESSOR CHURCH.—Drawing of a writing implement or *stylus* of

silver, found in digging the foundations of a house at Cirencester, and now in the museum there.



By Mr. R. H. SODEN SMITH.—The bronze three-legged pot, already described;—a silver peg drinking cup, made of a head ornament, worn by the Druse ladies in Syria;—and a large silver decade ring.

By Messrs. LAMBERT.—A fine Processional Cross of the fifteenth century, considered by Dr. Rock to be Florentine work, the back beautifully decorated with enamels;—a good *monstrance* of the cinque-cento period, almost renaissance in style;—three tankards of the seventeenth century, including a German “medal” tankard;—a *châsse*, a crystal vase, two salt-cellars, a table striking clock of lead, painted, of German work; a book-rest, &c.

Archaeological Intelligence.

A WORK of importance in connexion with the History of Mythology and Art in India will shortly be published as one of the Series under authority of the Secretary of State for India. It will comprise illustrations of Tree and Serpent Worship from sculptures of the Buddhist Topes in Central India, to which the attention of the Archæological Institute was invited during the last session by Mr. Fergusson, by whom the letter-press of the volume now announced will be supplied. The monuments in question are ascribed to the first and the fourth century of the Christian era; they are covered with sculptures representing Buddhism at a period long anterior to the age of the sacred books. Information regarding this valuable work may be obtained from Messrs. Allen, 13, Waterloo Place, publishers to the India Office, by whom subscribers' names are received. The volume will contain 57 photographs from the original sculptures, and numerous other illustrations.

The student of mediæval art will not fail to welcome the completion of an attractive illustrated manual, by M. P. Lacroix. It is entitled,—“*Les Arts du Moyen Age et de l'Époque de la Renaissance* ;” illustrated by 17 chromo-lithographs and 400 woodcuts. The work may be obtained from Messrs. Williams and Norgate.

We notice, with satisfaction, the continuation of a valuable contribution to Topography in the Northern Counties, by Mr. George Tate, F.G.S., the secretary of the Berwickshire Naturalists' Club, to whom the Institute has frequently been indebted for communications relating to ancient relics in Northumberland, the remarkable mountain fortresses, mysterious rock-markings or symbols, and other objects of interest. The second

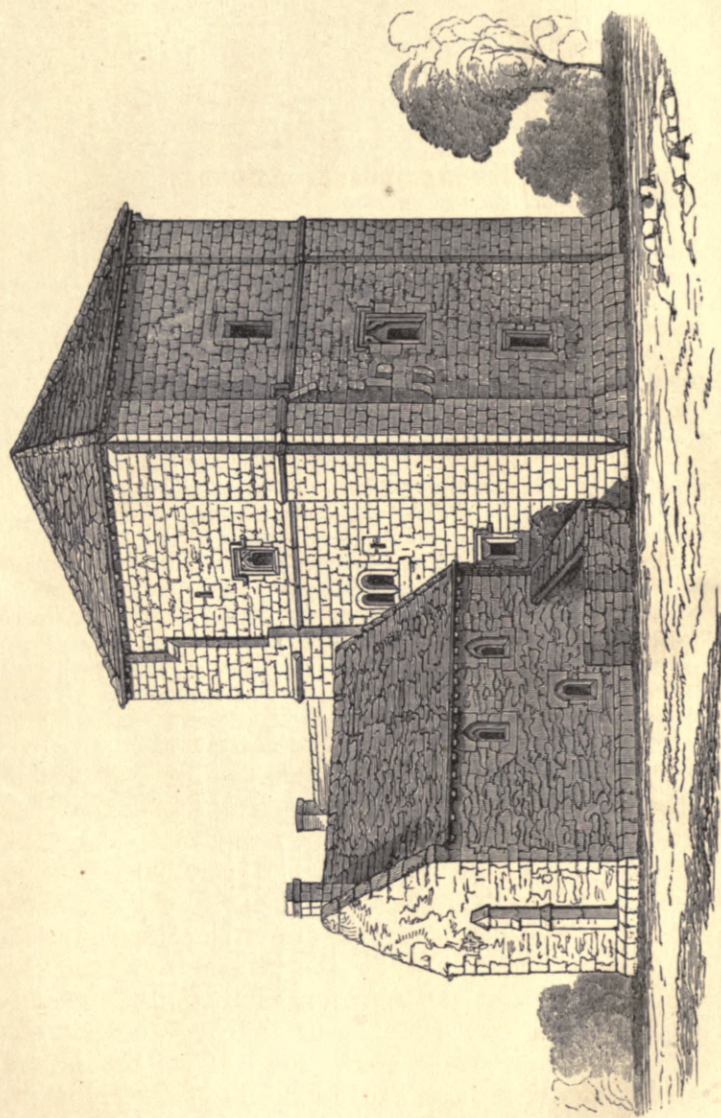
volume of his History of the Borough, Castle, and Barony of Alnwick is in course of publication ; the first part has lately been issued to the subscribers by the publisher, Mr. H. Blair, Alnwick.

The variety and interest of relics of all periods, discovered on the shores of Cheshire, have been repeatedly brought under our notice, especially by Dr. Hume, on occasion of the meeting of the Institute at Chester, in 1855. Every archæologist, to whom the value of Dr. Hume's elaborate work on these vestiges is known, will welcome the supplementary memoirs by Mr. H. Ecroyd Smith, who announces his "Notabilia of the Archæology and Natural History of the Mersey District, during three years, 1863—65." They may be obtained from the author, Aldborough House, Egremont, Birkenhead.

A series of photographs have been published by the Huddersfield Archæological and Topographical Association, that may be viewed with interest by our readers. Four views of the sculptured cross at Walton, near Wakefield, specially claim attention on account of the elaborate designs of interlaced and foliated work. Two views of Rastrick Cross, a relic of the like early character, have been prepared, also photographs of Hartshead Church, the Roman remains at Slack, &c. They may be obtained from Fairless Barber, Esq., Hon. Sec. of the Huddersfield Association, or from Mr. Appleyard, Brighouse.

We are enabled to announce, with satisfaction, that a permanent memorial of one of the most interesting features of the National Exhibition of Works of Art at Leeds, is in preparation. The important Series of Portraits of Yorkshire Worthies was originated and skilfully combined on the occasion by Mr. Edward Hailstone, whose name has been so honorably associated with previous collections, archæological and artistic, in which our Society has taken part. It is proposed to issue (to Private Subscribers only) a selection of photographs of these portraits, highly valuable as examples of art,—replete, also, with interest as connected with local and national history. The publication will comprise two hundred portraits, accompanied by biographical notices prepared by Mr. Hailstone. It will form two folio volumes. Subscribers' names should be sent to Messrs. Cundall and Fleming, 168, New Bond Street, London.

WATTLESBOROUGH TOWER, SHROPSHIRE.



View taken from the South-West. From a drawing by Edward Blore, Esq., F.S.A.

The Archaeological Journal.

JUNE, 1868.

WATTLESBOROUGH TOWER, SHROPSHIRE.

By EDWARD BLORE, Esq., D.C.L., F.S.A.

WATTLESBOROUGH TOWER stands on elevated ground in the parish of Cardiston, on the property of Sir Baldwin Leighton, Bart., and about 9 miles west of Shrewsbury. Though now reduced to the humble condition of a farmhouse, it evidently forms a portion of what was originally a very early and interesting fortified mansion.

With the exception of the Tower, nothing now remains of the original buildings, except a small attached projection on one side, of considerable antiquity, but not coeval with the Tower, though probably little later, nor of sufficient architectural character to fix the date with certainty.

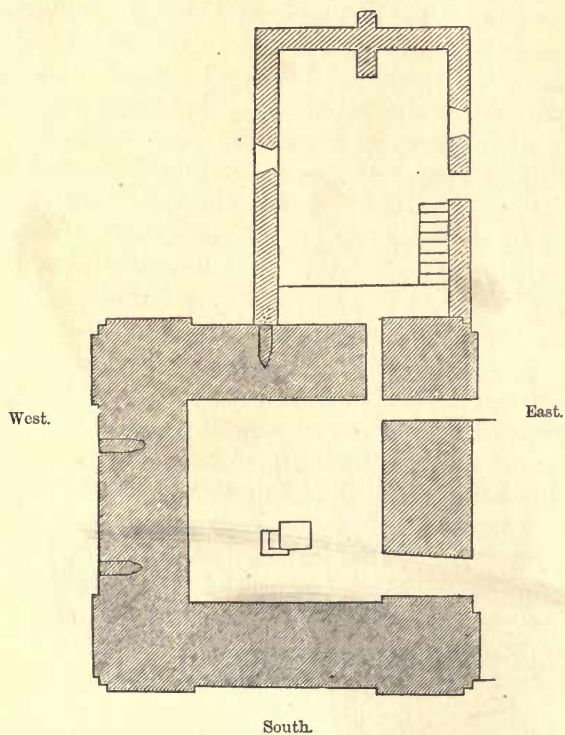
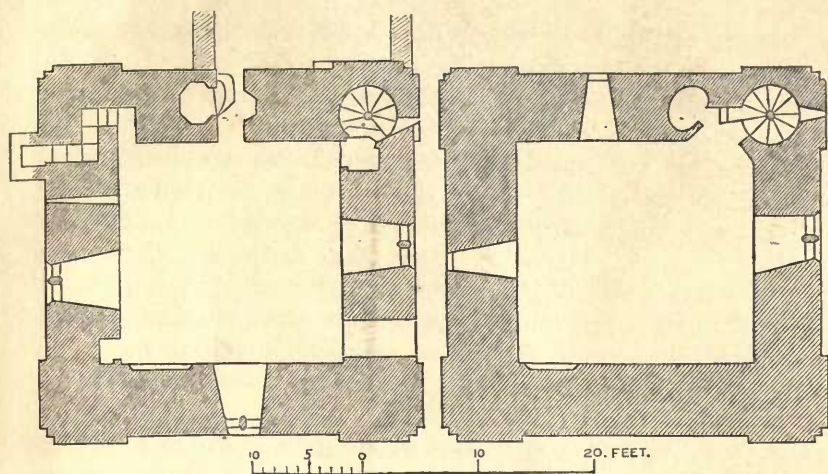
The Tower is quadrangular in plan, and at the present time about 50 ft. high; but, as the original summit has been destroyed, and it is now covered by a modern square roof, it is difficult to say how much higher it may have been, or how finished. The existence, however, of the weather-mouldings of a gable existing on each face of the opposite internal walls immediately below the present roof, and the set-back of the wall at the springing of these gable mouldings on the other two walls, seem to indicate that the original termination was a gable one. If so, the lateral walls must have been raised to the height of the gables, at least, to convert the Tower to its present square form. There is nothing, however, externally in the character of the masonry to indicate this change. Externally the masonry is good, square, well-dressed ashlar, remarkably well built, and exhibiting no symptoms of decay. The walls are 6 ft. thick,

the angles are finished with broad, flat buttresses 6 ft. wide and 10 in. deep.

Including the basement, the Tower is divided into three stories. As far as I am able to judge from the few original windows remaining, they were narrow square loops ; but most of them have at subsequent periods been enlarged to let in more light. These alterations have been made about the middle of the fifteenth century. Externally they have little depth ; but internally they are bevelled very much, to throw more light into the rooms, and have elliptical arched heads of good execution. In one angle is a circular stone stair, commencing with the first floor and continued to the roof, but having no communication with the basement, nor does there appear ever to have been any. There is, however, on the first floor, a good-sized, circular-headed, double-chamfered door, enclosing a square-headed lintel opening internally, on which side it appears to have been secured by a strong bar, the holes for fixing which remain. The inference that I draw from this, connected with the want of communication between this and the lower floor, is, that this door formed the real and only entrance to the Tower, and, being very much above the level of the outside ground, was approached externally by a flight of stone steps, which no longer exist, as this side of the Tower is now occupied by modern buildings, and all original traces are obliterated. This is not unusual in existing houses of about the same date. Some steps, formed out of the thickness of the wall, lead from the first floor to an external projection, supported on plain corbels ; this was evidently the garderobe. It is now a mere ruinous fragment. In each of the upper floors is a fireplace ; they are not, however, original, but were probably made when the windows were altered. They are square-headed and plain, the lower one only having a shallow moulding around it. Notwithstanding the strength of the walls, there is no stone vaulting, nor has there ever been any,—a peculiar circumstance in a tower of this age and style, as we generally find the basement and sometimes the upper floors vaulted.

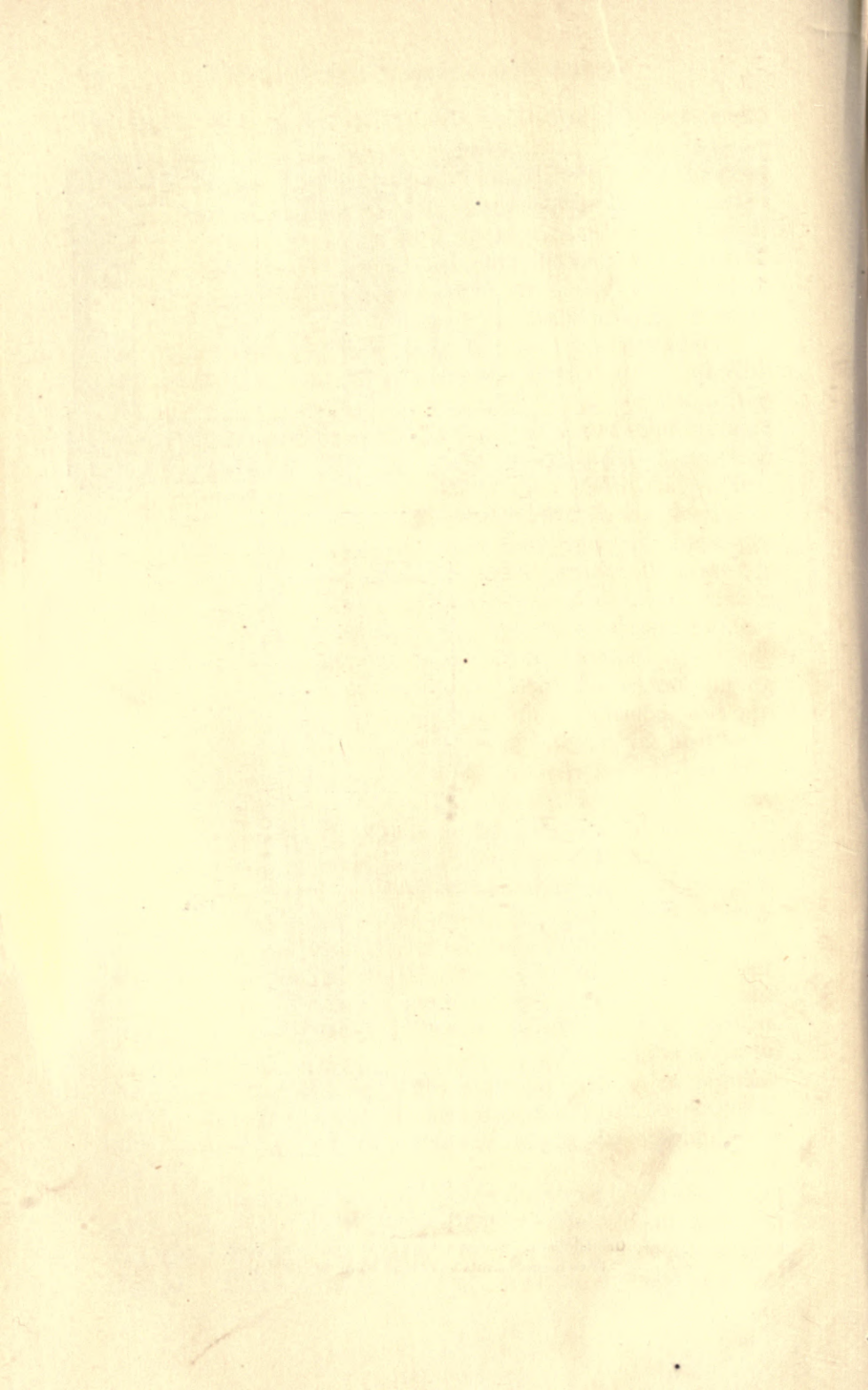
In the basement is a small, pointed doorway, of the earliest style and most simple form, which no doubt communicated with the adjoining buildings, and was easily secured in case of need. There is also standing clear of the walls a large

North.



South.

Wattleborough Tower, Shropshire.
Ground-Plans, Basement, First Floor and Second Floor.
From measurements by Edward Blore, Esq., F.S.A.



stone, wrought to a shape and firmly fixed in the ground, which I believe to be its original position, but for what purpose placed there I cannot guess. Attached to the outside of the Tower, and close under the roof of the ancient attached building, is a stone fireplace, supported on corbels, having a flat-pointed, moulded head. This is so placed as to be totally useless for any present purpose, nor was there apparent use for it at any time.

From the almost total absence of architectural detail, it is difficult to judge, with certainty, as to the age of this tower ; but, from the few indications to be relied upon, I think its erection may safely be referred to the close of the twelfth century.

The earthwork, with which the Tower is connected, encloses a space of 56 yards square, and 5 yards wide, at the top, sloping inwardly on one side, and thus forming a sunk area, which appears, during the occupation of the mansion, in recent times, to have been used as an ornamental garden, with a mount at one angle ; on the other side the slope is to the moat. There is no appearance of masonry in any part of this earthwork that I could discover, and it is doubtful whether it formed an outer defence to the mansion or not. I very much suspect that it belongs to an earlier period. Had any Roman remains been found in the place or neighbourhood, I should have suspected that this earthwork belonged to that age ; but I could not discover that any such remains had been found. I have no doubt, however, that this fortified mansion and earthwork formed one of the fortified posts which stretched across the district, of which Alberbury is one ; Wollaston, where there is a large mound, is another, this line of strongholds, probably, included ; The Marsh, Westbury, where there is an ancient moated house with earthworks ; and terminated with Caſs Castle, which, from its commanding position and superior magnitude and strength, dominated over the whole surrounding country.

The first historical account that we have of Wattlesborough is in Domesday Book. At the period of the Survey it was held by Roger Fitz Corbet, of the Norman earl. Edric, a Saxon, previously held it, when there were 2 hides geldable ; in demesne, 3 ox-teams. There were also 2 neat-herds, 2 villans, 1 boor, and 1 radman, with 5 oxen, and there might be 2 ox-teams more there.

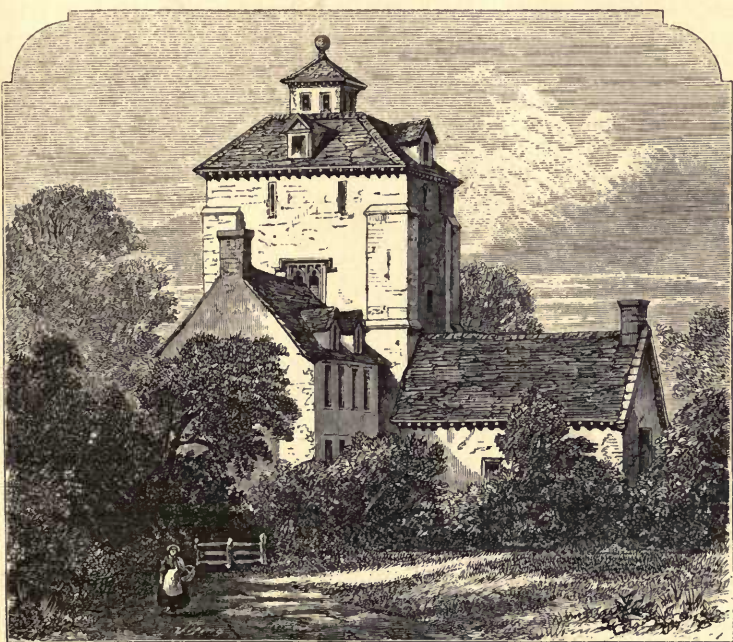
From this time we have no further information as to the descent of the place, until the 26th Hen. II. (1179-1180), when Richard Corbet held it, but in what way it descended to him does not appear, most probably through a succession of Corbets, the offshoot of the main branch at Caus. After this Richard Corbet, the place was inherited by his son and heir, Richard Corbet the second. From him it descended to Robert, his son and heir, a man of great activity and enterprise, who seems to have been engaged in all the bustling local transactions ; and, after two more generations, it came into the hands of the De la Poles, by the marriage of the heiress, Elizabeth Corbet, with John de la Pole, lord of Mawddy, Trefgarn Owen, &c., through his mother, daughter of Llewellyn.

The information contained in Eyton's History of Shropshire terminates at this point : for a continuation of the descent of the property down to the present time, together with other interesting particulars connected with the history of Wattlesborough, I am indebted to the kindness of Mrs. Edward Childe, of Kinlet, the daughter of Sir Baldwin Leighton, the present owner of the place.

The Tower was probably built by Richard Corbet, about 1280, as a place of defence against the inroads of the Welsh, for as Caus Castle overlooks the Valley of the Rea, so Wattlesborough Castle commands the pass formed by the Long Mountain and the Bredden.

Though not the only residence of its successive owners, this castle appears to have been constantly inhabited, for Elizabeth, the only child and heir of Sir Fulk Corbet, was born there in 1375, and baptized in the neighbouring church of Alberbury. Her son, Fulk de Mawddy, was born there in 1390 ; and her grandson, Sir John de Burgh, in 1414. The Leightons, who succeeded to Wattlesborough by marriage with a daughter and coheir of Sir John de Burgh, in 1471, made it their chief residence until 1711, when Sir Edward Leighton removed to Loton, a house about a mile distant. Since that time, Wattlesborough has been used as a farmhouse.

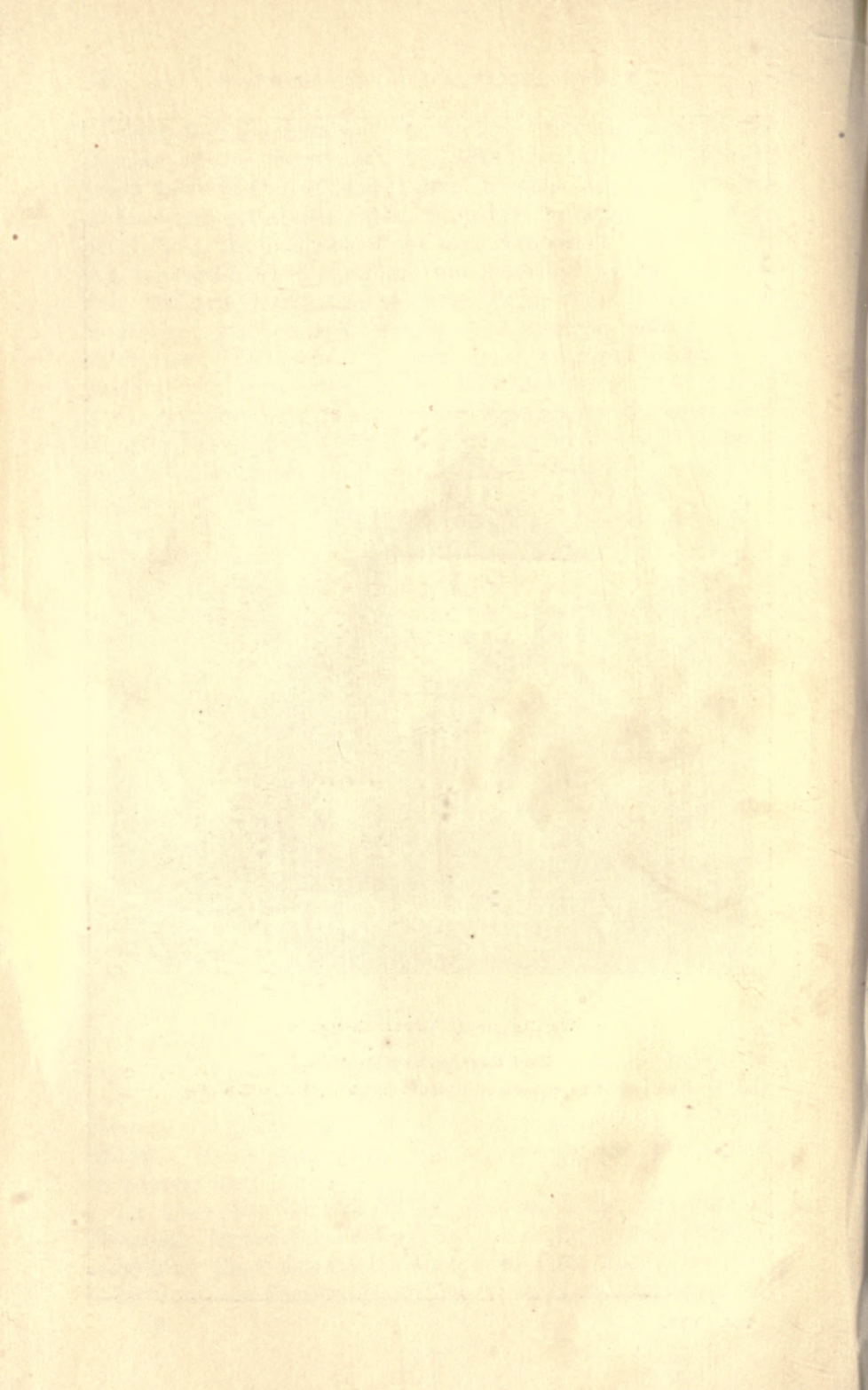
In 1584, the Earl of Essex, afterwards the favourite of Elizabeth, visited Sir Edward Leighton at Wattlesborough, remaining there from 24th March till 15th May. He probably came to Shropshire with a view of raising forces for



Wattlesborough Tower, Shropshire.

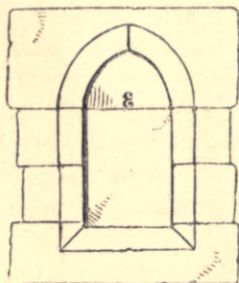
North-East view, taken about 1819.

From a sketch in possession of Sir Baldwin Leighton, Bart., at Loton Park

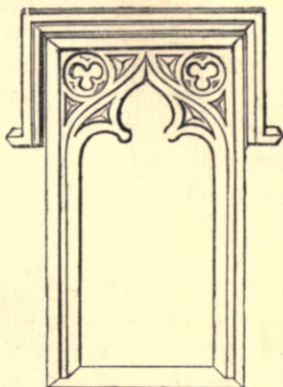




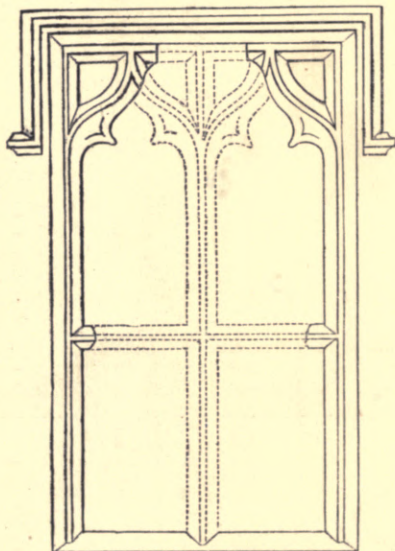
WATTLESBOROUGH TOWER, SHROPSHIRE.



Windows in building N. of the Tower.



Second Floor.



First Floor.

Windows inserted probably about the middle of the fourteenth century.

From drawings by Edward Blore, Esq., F.S.A.

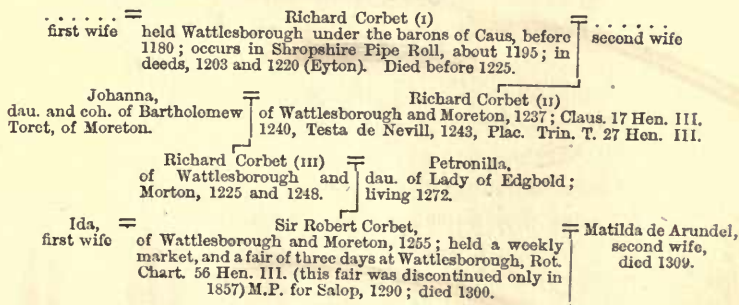
the expedition against Holland (see Blakeway's History of Shrewsbury). The manor and township of Wattlesborough still comprise portions of the parishes of Alberbury and Cardeston, and contain about 2500 acres.

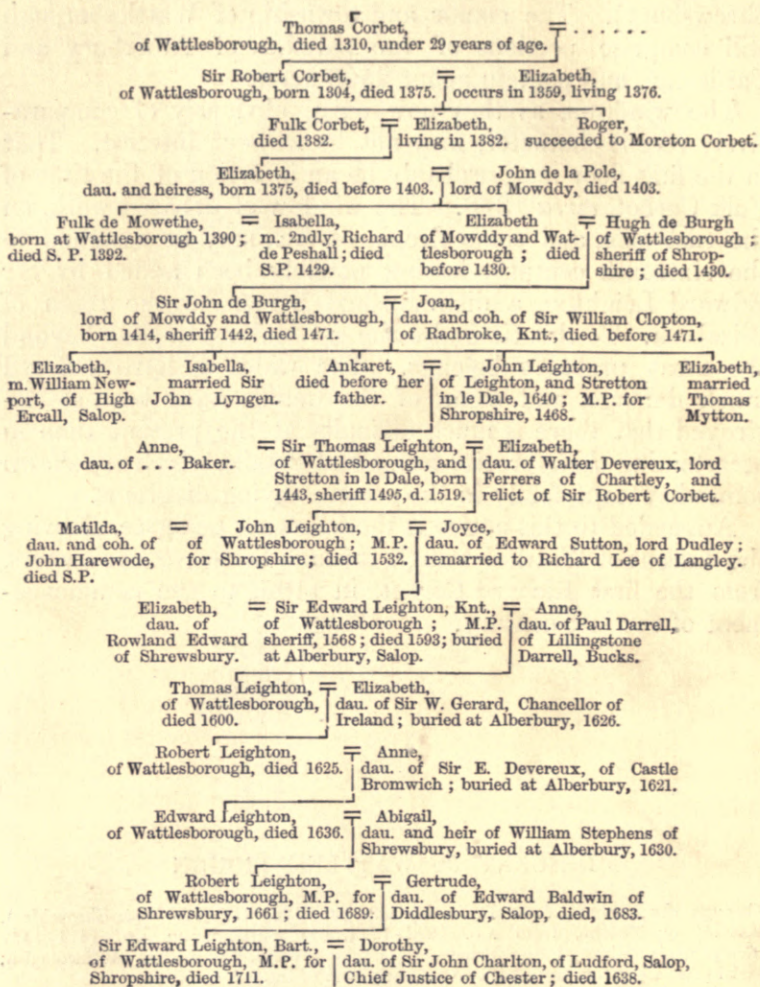
The windows, as they now exist, obviously of comparatively recent character, may not be without interest. That in the first floor may probably be an insertion of the time of Fulk Corbet, *circa* 1340. The window of debased work, on the east side, and some fireplaces, &c., may be assigned to the sixteenth century, having possibly been added by Sir Edward Leighton, a distinguished person in the reign of Elizabeth. To this time also the garden or *plaisance* beyond the moat probably belongs. The windows have suffered much damage, and some of the details have been so destroyed that there is much difficulty at the present time in ascertaining their precise forms and details, which are shown somewhat imperfectly in the accompanying diagrams.

Appended to this notice is the following pedigree, showing the descent of Wattlesborough, through the successive owners, from the first Richard Corbet, in 1195, to the commencement of the last century.

DESCENT OF WATTLESBOROUGH

Through the Corbets, from Domesday till A.D. 1382 (Eyton's Hist. Shropshire), Mawddy or Moethe, from A.D. 1382-1414, De Burgh, from A.D. 1414-1471 (Bridgeman's Hist. of the Princes of Upper Powys, Collectanea Archæologica, part I.) and Leighton, from 1471 to the early part of the last century.



DESCENT OF WATTLESBOROUGH—*continued.*

ON A CERAUNIA OF JADE CONVERTED INTO A Gnostic
TALISMAN.

By C. W. KING, M.A.

FEW relics of antiquity combine in one so many and so widely differing points of interest, with respect to the material, the strangely dissimilar uses to which the same object has been applied in two opposite phases of the history of Man, and, above all, the curious superstitions engendered by its peculiar form, as does the stone brought under the notice of the Institute by General Lefroy at the meeting of February 7th of the present year. The kindness of that gentleman having afforded me full opportunity for the careful examination of this interesting monument, I shall proceed, at the request of some members of our Society, to embody in as succinct a form as their multifarious nature will permit, the observations suggested to me by that examination.

The subject, therefore, of this memoir is a small stone celt of the common pattern, but of very uncommon material (in the *antique* class), being made, not of flint, but of dark-green jade or nephrite, 2 in. by $1\frac{1}{2}$ in. in length and greatest width ; and brought, there is reason to believe, from Egypt many years ago, by Colonel Milner, aide-de-camp to Lord J. Bathurst, during the English occupation of Sicily in 1812. Each of its two faces is occupied by a Gnostic formula, engraved with much neatness, considering the excessive hardness of the material, in the somewhat debased Greek character that was current at Alexandria during the third and fourth centuries of our era.

The most important of these two formulæ has been ingeniously forced to take the outline of a wreath composed of broad leaves, in number *fourteen* (or the sacred *seven* duplicated), and doubtless intended for those of the "Five Trees" that figure so conspicuously in Gnostic symbolism ; the ends being tied together with four broad ribbons. This is a design of which no other example has ever come to my

knowledge amongst the innumerable and wondrously varied devices excogitated by the prolific fancy of this religion of mysteries. Upon the four ties are engraved in very minute letters different combinations of the seven Greek vowels, whilst each of the leaves is emblazoned with some "Holy Name," of which many can be easily recognised as constantly recurring in charms of this class; others are disguised by a novel orthography; whilst a few, from the uncertain forms of the lettering, defy all attempts at interpretation.

To the first series belong **ABPACA**, "Abraxas," properly an epithet of the sun, but designating here the Supreme Deity; **ΙΑΩΟΥΙΕ**, "Iao, Jehovah;" **ΑΒΛΑΝΑ**, "Thou art our Father!" **ΓΑΜΒΡΙΗΛ**, a curious mode of spelling "Gabriel," that testifies to the difficulty ever felt by the Greeks of expressing the sound of our B; **ΑΚΤΝΟΝΒΩ**, which contains the Coptic form of Anubis; **ΔΑΜΝΑΜΕΝΕΥΣ**, the sun's name in the famous "Ephesian Spell;" and, most interesting of all, **ΠΣΑΝΤΑΡΕΟΣ**, who can be no other than the **ΙΥΑΝΤΑ** of the *Pistis-Sophia*,¹ one of the great *Τριδυνάμεις*, a Power from whom is enthroned in the planet *Mars*. To the uncertain belong **COYMA**, probably for **COYΜΑΡΤΑ**, a name occurring elsewhere, and perhaps cognate to the Hindoo *Sumitri*, **ΧΩΝΟΝΙΧΑΡ** which may be intended for **ΧΑΡ-ΧΝΟΥΜΙΣ**, a common epithet of the Agathodæmon Serpent; **ΑΕΙΩΕΗΑΑΝΗΣ**; **ΝΕΙΧΑΡΟΠΛΗΣ**; the two last, spells unexplained but very common; **ΜΟΝΑΡΧΟΣ**; whilst **ΑΧΑΡCIC** and the rest appear here for the first time, if correctly so read.

The other face is covered with an inscription, cut in much larger letters, and in *eight* lines. This number was certainly not the result of chance, but of deep design, for it was mystic in the highest degree, representing—so taught the profoundest doctor of the Gnosis, Marcus—the divine Ogdoad, which was the daughter of the Pythagorean Tetrad, the mother of all creation.² The lines 2, 4, 5, consist of Greek

¹ Cap. 361. A work ascribed to Valentinus, and the only one of the numerous Gnostic Gospels that has been preserved. It professes to be the esoteric teaching of Christ delivered during the *eleven* years he abode on earth after his resurrection; and written down by Philip: its system, however, is pure Majianism veiled under scriptural names. But, for that very reason, it throws more light on the actual

Gnostic remains as to their types and terminology, than do all the notices of the religion to be found in other authorities collectively. The work was discovered in a Coptic MS. of the British Museum, by Schwartz, and published from his transcript, with a Latin version, by Petermann, in 1853.

² St. Hippolytus, *Refut. Om. Hæres.* vi. 50.



Celt, or Ceraunia, of dark green jade, inscribed with Gnostic formulae,
with an enlarged representation of one of the inscribed faces.



letters used as *numerals*, intermixed with *siglæ*, which, from their constant occurrence upon monuments of a like nature, are supposed, with good reason, to be symbols of the planets. The numerals, on their part, probably denote various deities, for the Alexandrian Gnosis was the true daughter of Magianism; and in the old theology of Chaldea every god and astral genius had a *number* of his own, and which often stands instead of his proper name in dedicatory inscriptions.³ Thus, the number of Hoa (Neptune) was 40; of Ana (Pluto), 60; of Bel (Jupiter), 50; of the Sun, 20; of the Moon, 30; of the Air, 10; of Nergal (Mars), 12; &c.

A fragment of the *Pistis-Sophia*⁴ supplied the "spiritual man" with a key to the right interpretation of similar stenography in his own creed. "These be the *Names* which I will give unto thee, even from the Infinite One downwards. Write the same with a sign (cypher), so that the sons of God may manifest (understand?) them out of this place. This is the name of the Immortal One, AAA ΩΩΩ.⁵ And this is the name of the Voice whereby the Perfect Man is moved, III. These likewise be the interpretations of the names of the Mysteries. The first is AAA, and the interpretation thereof is ΦΦΦ. The second, which is MMM, or which is ΩΩΩ, the interpretation thereof is AAA. The third is ΥΥΥ, the interpretation thereof is ΟΟΟ. The fourth is ΦΦΦ, the interpretation thereof is NNN. The fifth is ΔΔΔ, the interpretation thereof is AAA, the which is above the throne of AAA. This is the interpretation of the second AAAA, namely, AAAAAAAA; the same is the interpretation of the whole Name."

Lines 7, 8, are made up of vowels, variously combined, and shrouding from profane eyes the *Ineffable Name* ΙΑΩ; which, as we are informed by many authorities (the most ancient and trustworthy being Diodorus Siculus),⁶ was the name of the God of the Jews; meaning thereby their mode of writing "Jehovah" in Greek characters.

Line 3 consists of the seven vowels placed in their natural order. This was the most potent of all the spells in the Gnostic repertory; and its importance may justify the ex-

³ On this curious subject see Rawlinson's *Ancient Monarchies*, iii. p. 466.

⁴ Cap. 125.

⁵ That is 1000 and 800 tripled. The

next numbers are 10000 tripled, and so on.

⁶ *Bibliotheca Historica*, i. 94.

tensiveness of the following extract from the grand textbook of this theosophy, which sets forth its hidden sense and wondrous efficacy. The primary idea, however, was far from abstruse, if we accept the statement of the writer "On Interpretations" that the Egyptians expressed the name of the Supreme God by the seven vowels thus arranged—**ΙΗΩΟΥΑ**.⁷ But this single mystery was soon refined upon, and made the basis of other and infinitely deeper mysteries. In an inscription found at Miletus (published by Montfaucon), the Holy **ΙΕΟΥΑΗΩΑΕΙΟΥΩ** is besought "to protect the city of Miletus and all the inhabitants of the same ;" a plain proof that this interminable combination only expressed the name of some *one* divine being. Again, the *Pistis-Sophia* perpetually brings in **ΙΕΟΥ** invariably accompanied with the epithet of "the Primal Man," *i. e.*, He after whose image or *type* man was first created. But in the fullness of time the semi-Pythagorean, Marcus, had it revealed unto him that the seven heavens in their revelation sounded each one vowel, which, all combined together, formed a single doxology, "the sound whereof being carried down to earth becomes the creator and parent of all things that be on earth."⁸

The Greek language has but one word for *vowel* and *voice* ; when, therefore, "the seven thunders uttered their voices," the seven vowels, it is meant, echoed through the vault of heaven, and composed that mystic utterance which the sainted seer was forbidden to reveal unto mortals. "Seal up those things which the seven thunders uttered, and write them not."⁹ With the best reason, then, is the formula inscribed on a talisman of the first class, for hear what Valentinus himself delivers touching its potency.¹ "After these things his disciples said again unto him, Rabbi, reveal unto us the mysteries of the Light of thy Father, forasmuch as we have heard thee saying that there is another baptism of smoke, and another baptism of the Spirit of Holy Light, and moreover an unction of the Spirit, all which shall bring our souls into the treasurehouse of Light. Declare therefore unto us the mysteries of these

⁷ This is in fact a very correct representation, if we give each vowel its *true* Greek sound, of the Hebrew pronunciation of the word Jehovah.

⁸ Hippolytus, vi. 48.

⁹ Rev. x. 4.

¹ *Pistis-Sophia*, cap. 378.

things, so that we also may inherit the kingdom of thy Father. Jesus said unto them, Do ye seek after these mysteries? No mystery is more excellent than they; which shall bring your souls unto the Light of Lights, unto the place of Truth and Goodness, unto the place of the Holy of holies, unto the place where is neither male nor female, neither form in that place but Light, everlasting, not to be uttered. Nothing therefore is more excellent than the mysteries which ye seek after, saving only the *mystery of the Seven Vowels and their forty and nine Powers*, and the numbers thereof. And no name is more excellent than all these (Vowels),² a Name wherein be contained all Names and all Lights and all Powers. Knowing therefore this Name, if a man shall have departed out of this body of Matter, no smoke (of the bottomless pit), neither any darkness, nor Ruler of the Sphere of Fate,³ nor Angel, nor Power, shall be able to hold back the soul that knoweth that Name. But and if, after he shall have departed out of this world, he shall utter that Name unto the fire, it shall be quenched, and the darkness shall flee away. And if he shall utter that Name unto the devils of the Outer Darkness, and to the Powers thereof, they shall all faint away, and their flame shall blaze up, so that they shall cry aloud 'Thou art holy, thou art holy, O Holy One of all holies!' And if he shall utter that Name unto the Takers-away for condemnation, and their Authorities, and all their Powers, nay, even unto Barbelo,⁴ and the Invisible God, and the three Triple-powered Gods, so soon as he shall have uttered that Name in those places, they shall all be shaken and thrown one upon the other, so that they shall be ready to melt away and perish, and shall cry aloud, 'O Light of all lights that art in the Boundless Light! remember us also, and purify us!'" After such a revelation as this, we need seek no further for the reason of the frequent occurrence of this formula upon talismans intended, when they had done their duty in this world, to accompany their owner into the tomb, continuing to exert there a protective influence of a yet higher order than in life.

² Evidently alluding to the collocation of the vowels on our talisman.

³ The twelve Æons of the Zodiac, the creators of the human soul, which they eagerly seek to catch when released from

the body in which they have imprisoned it.

⁴ The divine mother of the Saviour, and one of the three "Invisible Gods." Cap. 359.

For the student of the mineralogy of the ancients this celt has very great interest in point of *material*, as being the only specimen of true jade, bearing indisputable marks of either Greek or Roman workmanship, that, so far as my knowledge extends, has ever yet been brought to light. This ancient neglect of the material is truly difficult to explain, if the statement of a very good authority, Corsi, be indeed correct, that the sort showing the deepest green is found in Egypt. The known predilection of the Romans for gems of that colour, would, one should naturally expect, have led them in that case to employ the stone largely in ornamentation, after the constant fashion of the Chinese, and to value it as a harder species of the *Smargadus*. The circumstances under which this relic was brought to England render it more than probable that Egypt was the place where it was found; a supposition corroborated by the fine quality of the stone exactly agreeing with what Corsi remarks of the Egyptian kind. That *Alexandria* was the place where the inscription was added upon its surface can admit of little question; the lettering being precisely that seen upon innumerable other monuments which can with certainty be assigned to the same grand focus of Gnosticism. In addition to this, it is very doubtful whether in the third or fourth centuries a lapidary could have been found elsewhere throughout the whole Roman Empire capable of engraving with such skill as the minute characters within the wreath evince, upon a material of this, almost insuperable, obduracy. From the times of the Ptolemies down to the Arab conquest, and even later, Alexandria was the seat of the manufacture of vases in rock crystal. This trade served to keep alive the expiring Glyptic art for the only purpose for which its productions continued to be demanded—the manufacture of talismans, consignments of which must have been regularly shipped, together with the crystal-ware,⁵ to Rome, and equally to the other important cities of the empire.

The primitive Egyptians, like the early Chaldeans, used stone in the place of metal for their cutting instruments, and continued its use for making particular articles down into historic times. Herodotus mentions the regular employment of the “Ethiopian stone” sharpened, for a dissect-

⁵ Dum tibi Niliacus portat crystallæ catapulus.” Mart. xii. 72.

ing-knife⁶ in the process of embalming, and similarly for pointing the arrows⁷ carried by the contingent of the same nation in the army of Xerxes. The Alexandrian citizen, half-Jew half-Greek, who had the good fortune to pick up this primæval implement, doubtless rejoiced in the belief that he had gotten a "stone of virtue," most potent alike from substance, figure, and nature, and therefore proceeded to do his prize due honour by making it the *medium* of his most accredited spells—nay, more, by inventing a new formula of unusual complication and profundity whereby to animate its inherent powers. As regards its *substance*, the stone probably passed then for a *smaragdus* of exceptional magnitude, and that gem, as Pliny records,⁸ was recommended by the magi as the proper material for a talisman of prodigious efficacy, which, duly engraved, should baffle witchcraft, give success at court, avert hailstorms, and much more of like nature. The *smaragdus* of the ancients was little more than a generic designation for all stones of a *green* colour, and the entire Gnostic series strikingly demonstrates that this hue was deemed a primary requisite in a talismanic gem—the almost exclusive material of the class being the green jasper and the plasma.

Again, as regards *figure*, this celt offered in its *triangular* outline, that most sacred of all emblems, the mystic Delta, the form that signified maternity, and was the hieroglyph of the moon. This belief is mentioned by Plutarch,⁹ and explains why the triangle so often accompanies the figure of the sacred baboon, Luna's special attribute, on monuments, where also it is sometimes displayed elevated upon a column with that animal standing before it in the attitude of adoration.

Lastly, the supposed *nature* of this gift of Fortune was not of Earth, inasmuch as it then passed for a holy thing that "had fallen down from Jupiter," being, in fact, nothing less than one of that god's own thunderbolts. A notion this which will doubtless strike the modern mind as so strange, or rather as so preposterous, that it necessitates my giving at full length my reasons for making such an assertion.

⁶ ii. 86.

⁷ vii. 69.

⁸ xxxvii. 40.

⁹ "De Iside et Osiride," cap. 75. He adds that the Pythagoreans called the

equilateral triangle "Athene"—a curious confirmation of the tradition quoted by Aristotle, that the Attic goddess was one and the same with the Moon.

And in truth the subject is well worth the trouble of investigation, seeing that the same superstition will be found to extend from an early period of antiquity down into the popular belief of our own times throughout a large extent of Europe.

It is in accordance with this notion that I have designated this celt a "ceraunia" (thunderbolt-stone), and it therefore remains for me to adduce my reasons for giving it what must appear to most people so unaccountable and highly inappropriate an appellation, *Sotacus*, who is quoted elsewhere by Pliny "as one of the most ancient writers on mineralogy," is cited by him¹ "as making two other kinds of the ceraunia, the black and the red, resembling *axe-heads* in shape. Of these, such as be black and round are sacred things; towns and fleets can be captured by their instrumentality. The latter are called *Bætyli*, whilst the oblong sort are the *Cerauniæ*. Some make out another kind, in mighty request in the practices of the magi, inasmuch as it is only to be found in places that have been struck by lightning." One would have been utterly at a loss to understand what the old Greek had been speaking about in the chapter thus confusedly condensed by the later Roman naturalist, or to discover any resemblance in form between the lightning-flash and an axe-head, had it not been for the popular superstition that has prevailed in Germany from time immemorial to the present day, and of which full particulars are given by Anselmus Boetius in his invaluable repertory of mediæval lore upon all such matters, written at the beginning of the 17th century.²

Under the popular names of "Strahl-hamner," "Donnerpfeil," "Donner-keil," "Strahl-pfeil," "Strahl-keil" (lightning-hammer, thunder-arrow or club, lightning-arrow, &c.), and the Italian "Sagitta,"³ he figures stone celts and hammers of five different, but all common, types; remarking that so firm was the belief in these things being the "actual arrow of the lightning" (*ipsa fulminis sagitta*), that should any

¹ xxxvii. 51.

² *Gem. et Lapid. Hist.* ii. cap. 261.

³ "Sætta" (a vulgar Italian excretion), is now restricted to the lightning-missile, the archer's shaft being expressed by the Teutonic "*freceia*," in accordance with the genius of the language which reserves the old Latin terms for the

things not of this world,—using those of the *lingua militaris* for every-day purposes. The flint arrow-heads found in the *terra marna* of the primæval Umbrian towns, are believed by the peasantry to have this celestial origin, and are highly valued as portable "lightning-conductors."

one attempt to controvert it, he would be taken for a madman. He however confesses with amusing simplicity that the substance of these thunderbolts is exceedingly like the common flint used for striking fire with; nay, more, he boldly declares he should agree with those few *rationalists* who, on the strength of their resemblance in shape to the tools in common use, pronounced these objects to be merely ordinary iron implements that had got *petrified* by long continuance in the earth, had it not been for the testimony of the most respectable witnesses as to the fact of their being discovered in places just seen to be struck with lightning. Besides quoting some fully detailed instances from Gesner, he adds that several persons had assured him of having themselves seen these stones dug up in places where the lightning had fallen. The natural philosophers of the day accounted for the creation of such substances in the atmosphere by supposing the existence of a vapour charged with sulphureous and metallic particles, which rising above a certain height became condensed through the extreme heat of the sun, and assumed a wedgelike form in consequence of the escape of their moisture, and the gravitation of the heavier particles towards their lower end! Notwithstanding this celestial origin, the virtue of the production was not then esteemed of a proportionally sublime order, extending no further than to the prevention or the cure of ruptures in children, if placed upon their cradles; and also to the procuring of sleep in the case of adults. In our own times Justinus Kerner mentions⁴ the same names for stone celts as universally popular amongst the German boors; but they are now chiefly valued for their efficacy in preserving cattle from the murrain, and consequently the finders can seldom be induced to part with them.

It must not, however, be supposed that Sotacus picked up this strange notion from the Teutones of his own age, whose very existence was probably unknown to him; his informants were unquestionably those magi cited at the conclusion of Pliny's extract. The Greek mineralogist had lived "apud Regem," that is, at the court of the King of Persia, very probably in the capacity of royal physician, like his countrymen Democedes and Ctesias. In that region

⁴ In his little treatise on Amulets.

he had ample opportunities of seeing stone celts, for Rawlinson observes⁵ that flint axes and other implements, exactly identical with the European in workmanship, are *common* in all the most ancient mounds of Chaldæa, those sites of primæval cities. Such elevations above the dead level of those interminable plains were necessarily the most liable to be lightning-struck; and hence probably arose the idea that these weird-looking stones (all tradition of whose proper destination had long since died out amongst the iron-using Persians) were the actual fiery bolts which had been seen to bury themselves in the clay. And again, to revert to the German belief, it must be remembered that Thor, the Northern Jupiter, is pictured as armed with a huge hammer in the place of the classical thunderbolt. The type of the god had been conceived in the far-remote ages when the stone-hammer was as yet the most effective and formidable of weapons, and was preserved unchanged out of deference to antiquity, after the true meaning of the attribute was entirely forgotten. Nevertheless, his worshippers, accustomed to behold the hammer in the hand of the god of thunder,—*ὕψιβρεμέτης* *Zeûs*,—very naturally concluded that these strange objects, of unknown use, found from time to time deep buried in the earth, were the actual missiles that deity had discharged. It is a remarkable proof of the wide diffusion of the same belief, that the late owner of the relic under consideration, habitually spoke of it as a "thunderstone,"—a name he could only have learnt from the Arabs from whom it was procured, seeing that no such notion with respect to *celts* has ever been current in this country. But every one whose memory reaches back forty years or more, may recollect, that wheresoever in England the fossil *Belemnite* is to be found, it was implicitly received by all, except the few pioneers of Geology (a word then almost synonymous with Atheism), as the veritable thunderbolt shot from the clouds, and by that appellation was it universally known. I, for one, can recollect stories, quite as respectably attested as those Boetius quotes concerning the *Ceraunia*, told respecting the discovery of new fallen belemnites under precisely the same circumstances; and, in truth, the same author does in the preceding chapter treat at length of the *Belemnites*, and his cuts show that the name

⁵ Ancient Monarchies, i. p. 120.

meant then what it does at present ; but he assigns to the missile an infernal instead of a celestial source, giving the vulgar title for it as “Alp-schoss,” (elfin-shot,) which he classically renders into “dart of the Incubus,” stating further that it was esteemed (on the good old principle, “*similia similibus curantur*”) of mighty efficacy to guard the sleeper from the visits of that much dreaded nocturnal demon. The Prussian, Saxon, and Spanish physicians employed it, powdered, as equally efficacious with the *lapis Judaicus*, in the treatment of the calculus. It was also believed a specific for the pleurisy in virtue of its *pointed* figure, which was analogous to the *sharp* pains of that disease, for so taught the universally accepted “Doctrine of Signatures.”

The *Cerauniæ* of Sotacus, however, comprised, besides these primitive manufactures of man, other substances, it is hard to say whether meteorites or fossils ; the nature of which remains to be discussed. Photius,⁶ after quoting the paragraph, “I beheld the *Bætylus* moving through the air, and sometimes wrapped up in vestments, sometimes carried in the hands of the ministers,” proceeds to give a summary of the wondrous tale told by the discoverer of the prodigy—one Eusebius of Emesa. He related how that being seized one night with a sudden and unaccountable desire to visit a very ancient temple of Minerva, situated upon a mountain at some distance from the city, he started off, and arriving at the foot, sat down to rest himself. Suddenly he beheld a globe of fire fall down from heaven, and a monstrous lion standing by the same, but who immediately vanished. Running to pick it up as soon as the fire was extinguished, he found this self-same *Bætylus*. Inquiring of it to what god it belonged, the thing made answer that it came from the Noble One (so was called a figure of a lion standing in the temple at Heliopolis). Eusebius thereupon ran home with his prize, a distance of 210 stadia (26 miles), without once stopping, being quite unable to control the *impetus* of the stone ! He described it as “of whitish colour, a perfect sphere, a span in diameter, but sometimes assuming a purple⁷ shade, and also expanding and contracting its dimensions, and having letters painted on it in cinnabar, of which he

⁶ Bibliotheca, 1063, R.

⁷ The Greek purple included every shade from crimson to violet.

gave the interpretation. The stone, likewise, if struck against the wall, returned answers to consultors in a low whistling voice." The grain of truth in this huge heap of lies is obviously enough, the fact that Eusebius having had the good fortune to witness the descent of a meteorite, and to get possession of the same, told all these fables about it in order to increase the credit of the oracular stone (which doubtless brought him in many fees) amongst his credulous townsfolk. Damascius⁸ (whose *Life of Isidorus Photius* is here epitomising) adds, that this philosopher was of opinion that the stone was the abode of a spirit, though not one of the mischievous or unclean sort, nor yet one of a perfectly immaterial nature. He furthermore states that other *bætyli* were known, dedicated to Saturn, Jupiter, and the Sun; and moreover that Isidorus and himself saw many of such *bætyli* or *bætylia* upon Mount Libanus, near Heliopolis in Syria.

As for the derivation of *bætylus*, the one proposed by the Byzantine Hesychius, who makes it come from *bæte*, the goatskin mantle, wherein Rhea wrapped up the stone she gave old Saturn to swallow, instead of the new-born Jove, cannot be considered much more satisfactory than Bochart's, who, like a sound divine, discovers in it a reminiscence of the stone pillar which Jacob set up at Bethel, and piously endeavours to force Sanconiathon, who speaks of the "living" stones, the *bæthylia*,⁹ to confirm his interpretation by correcting his text into "anointed."

But this last *bætylus* is beyond all question the same thing with that described by the Pseudo-Orpheus,¹ under the names of *Siderites*, and the *animated Orites*, "round, black, ponderous, and surrounded with deeply-graven furrows." In the first of these epithets may easily be recognised the *ferruginous* character common to all meteorites (*siderites* being also applied to the loadstone), whilst the second seems to indicate the locality where they most abounded viz., Mount Lebanon.

Sotacus' notice, indeed, of the efficacy of the *bætylus* in procuring success in seafights and sieges, is copiously illustrated by the succeeding verses of the same mystic poet,

⁸ A stoic philosopher under Justinian.

⁹ "Moreover the god Uranus devised

bæthylia, contriving stones that moved as having life."

¹ *Λιθικά*, 355.

who, it must be remembered, can claim a very high antiquity, there being sufficient grounds for identifying him with Onomacritus, a contemporary of Pisistratus, in the 6th century before our era. The diviner Helenus, according to him, had received this oracular stone from Apollo, and he describes the rites, with great minuteness, for the guidance of all subsequent possessors of such a treasure, by means of which the Trojan woke up the spirit within the "vocal sphere." This was effected by dint of thrice seven days' fasting and continence, by incantations and sacrifices offered to the stone, and by bathing, clothing, and nursing it like an infant. Through its aid, when at length rendered instinct with life, the traitorous seer declared to the Atridæ the coming downfall of Troy; the stone uttering its responses in a voice resembling the feeble wail of an infant desiring the breast. It is more than probable that Orpheus in describing the Orites, had in view the *Salagrama*, or sacred stone of Vishnu, still employed by the Brahmins in all propitiatory rites, especially in those performed at the death-bed. Sonnerat describes it as "a kind of ammonite, round or oval in shape, black, and very ponderous." The *furrows* covering its surface were traced by Vishnu's own finger; but when found of a violet colour, it is looked upon with horror, as representing a vindictive avatar of the god. The possessor keeps it wrapped up in a linen garment like a child, and often bathes and perfumes it—precisely the rites prescribed by our poet for the due consultation of the oracle of the Siderites.

From all this it may safely be deduced that the "stone of power," whether *bætylus* or *orites*, was in most cases nothing more than a fossil; either a ferruginous nodule, or an echinus filled with iron pyrites. Their being found in abundance in one particular locality, precludes the idea of these at least being meteorites, which latter, besides, never assume any regular form, but look like mere fragments of iron-slag. This explanation is strongly supported by the drawings Boetius gives² of what was then called the "Donner-stein," or "Wetter-stein," (thunder, or storm-stone,) and which he very plausibly identifies with Pliny's *Brontias* "that got into the head of the tortoise during thunderstorms," and which is described in another place as the "eye

² ii. cap. 264.

of the Indian tortoise" that conferred the gift of prophecy. His carefully drawn figure of this Donner-stein (which also passed for the "gros Kroten-stein," bigger toadstone), shows it to be only a fossil echinus of a more *oblate* form than the common sort. The regular toadstone, plentifully to be seen in mediæval rings, was, on the other hand, the small hollow hemisphere, the fossil tooth of an extinct fish, found in the greensand formation. In that age the Donner-stein was held to possess all the many virtues of the Toadstone, Belemnite, and Ovum Anguinum, in counter-acting poison, giving success in all enterprises, procuring sleep, and protection against danger of lightning. But the old physician, so much in advance of his times, cannot help winding up the list of its virtues with the hint, "Fides sæpe veritate major."

SUPPLEMENTARY NOTES ON CELTS AND OTHER IMPLEMENTS USED AS TALISMANS OR VICTORY-STONES.

THE axe-heads and hammer-heads of stone, known to us by the general designation of celts, have, until recent explorations, been regarded as comparatively of rare occurrence amongst ancient relics obtained from Eastern lands and from some other continental countries. Our information, however, in regard to objects of this class has become greatly extended. Mr. James Yates brought before us, in a former volume of this Journal, examples of stone celts from Java; an interesting specimen obtained at Sardis is figured, vol. xv. p. 178, and some others were found by Mr. Layard at Nineveh. The occurrence of any ornament or inscription upon such objects is very rare, but, amongst numerous stone implements lately obtained in Greece, one is noticed by M. de Mortillet (*Matériaux pour l'Histoire primitive de l'Homme*, Jan. 1868, p. 9), of which he had received from Athens a drawing and an *estampage*; it is described as "une hache en pierre serpentineuse, sur une des faces de laquelle on a gravé trois personnages et une inscription en caractères Grecs. L'ancien outil a évidemment été, beaucoup plus tard, quand on a eu complètement oublié son usage primitif, transformé en talisman ou pierre cabalistique."

At the annual meeting of the Antiquaries of the North,

21 March, 1853, under the presidency of the late King of Denmark, several recent acquisitions were exhibited, obtained for his private collection at Frederiksborg. Amongst these there was an axe-head of stone (length about $9\frac{1}{2}$ inches), perforated with a hole for the handle, and remarkable as bearing on one of its sides four Runic characters, that appear to have been cut upon the stone at some period more recent than the original use of the implement. It has been figured in the *Memoirs of the Society*, 1850-1860, p. 28 ; see also *Antiquarisk Tidsskrift*, 1852-1854, pp. 258-266. I am indebted to a friend well skilled in Runes and Scandinavian archæology, Dr. Charlton, secretary of the Society of Antiquaries of Newcastle, for the following observations on this interesting relic.

"The first letter is L, and, if we accept the idea that these were Runes of Victory, it may stand for the initial of Loki ; the second is Th, and may stand for Thor ; the third O, for Odin ; the fourth, Belgthor, with a T above it, may refer to Belgthor's friendship and alliance with Thor, and the T stands for Tyr. We may imagine the names of the Northern gods to have been cut on this stone axe to give it victory in battle, just as the old Germans and Saxons cut mystic Runes on their swords, a practice noticed by Haigh in his *Conquest of Britain by the Saxons*, p. 28, pl. 1, where he has figured amongst various examples of the *Futhorc*, or alphabet of Runic characters, one inlaid on a sword or knife found in the Thames, and now in the British Museum. At p. 51, *ibid.* pl. iii. fig. 20, he has cited also the Runic inscription on the silver pommel of a sword found at Gilton, Kent, formerly in the collection of the late Mr. Rolfe of Sandwich, and subsequently in the possession of Mr. Joseph Mayer. This relic is now in the precious museum bestowed by his generous encouragement of archæological science on the town of Liverpool. The interpretation given in the latter instance is as follows,—I eke victory to great deeds.³

"There was another explanation given of the characters on the Danish stone axe. It was read—LUTHR. O.—Ludr owns, namely, the weapon thus inscribed."

³ *Archæologia*, vol. xxxii., p. 321. A spear-head inscribed with Runes is noticed, *Journ. Brit. Arch. Ass.*, vol. xxiii., p. 387. There exist certain massive rings of metal inscribed with Runes, that may have

been, as some antiquaries suggest, appended to sword-hilts as charms. One of these rings, lately found at Carlisle, is in possession of Mr. Robert Ferguson, of Morton, near that city.

In the ancient Sagas, as remarked in Nilsson's *Primitive Inhabitants of Scandinavia* (translation by Sir John Lubbock, Bart, p. 214), mention occurs of amulets designated life-stones, victory-stones, &c., which warriors carried about with them in battle to secure victory. A curious relation is cited from one of the Sagas, that King Nidung, when about to engage in conflict, perceived that he had neglected to bring a precious heir-loom, a stone that possessed the virtue of ensuring victory. He offered the hand of his daughter, with a third part of his kingdom, to him who should bring this talisman before the fight commenced ; and, having received it, he won the battle. In another narrative, the daughter of a Scanian warrior steals during his slumbers the stone that was hung on his neck, and gave it to her lover, who thus became the victor. Nilsson observes that stones are found in museums, for instance, a hammer-stone with a loop, that appear to have been worn thus as talismans in war.

It is perhaps scarcely necessary to advert to certain axe-heads of stone, in their general form similar to those with which we are familiar as found in Europe ; upon these implements are engraved rude designs, such as the human visage, &c. These objects, of which an example preserved in a museum at Douai has been much cited, may be "victory-stones" of an ancient and primitive people, but they are now generally recognised as of Carib origin, and not Euraopen.

ALBERT WAY.

ON THE PAINTED GLASS IN FAIRFORD CHURCH, GLOUCESTER,
AND ITS CLAIM TO BE CONSIDERED THE WORK OF ALBERT
DURER.¹

By the Rev. J. FULLER RUSSELL, B.C.L., F.S.A.

It is presumed that all those whom I have now the honour to address are aware of the controversy on (what may not unfitly be termed the art-question of the hour) the claim of the stained glass windows in Fairford Church, Gloucestershire, to be considered the work of Albert Durer, which has resulted from an able Paper² which was read by Mr. Henry F. Holt, during the recent congress of the British Archaeological Association, at Cirencester, in that county.

The following observations will be antagonistic to the paper in question, but offered in no unfriendly spirit, and simply in the interest of truth. I do not intend to combat all Mr. Holt's positions, but I am desirous to make some remarks (I.) in reply to his statement that the Fairford windows have been subjected to a "neglectful silence of 370 years"; and also (II.) to accept the challenge recently given by him in the columns of a daily journal,³ and animadvert upon a portion of his arguments in proof of his supposed discovery that those windows were veritably and exclusively designed and executed by the "great artist of Nuremberg."

In reference to the asserted neglect of the windows I will mention the facts which follow. A full, although not very accurate, description of them, "taken from an old MS.," occurs at the end of a scarce volume which was edited by the antiquary Hearne in 1716.⁴ This account is introduced by

¹ Read at the Monthly Meeting of the Archæological Institute, Nov. 6, 1868.

² Published in *The Builder*, vol. xxvi. No. 1332.

³ See Mr. Holt's Letter in the *Standard*, Sept. 15, 1868.

⁴ *Guilielmi Roperi vita D. Thomæ Mori Equitis Aurati, lingua Anglicana*

contexta. Accedunt Mori Epistola de Scholasticis quibusdam Trojanos sese appellantis; Academiæ Oxoniensis Epistolæ et Orationes aliquam multæ; Anonymi Chronicon Godstovianum; et Fenestrarum depictarum Ecclesiæ Parochialis de Fairford in agro Gloucestriensi Explicatio. 8vo. 1716.

"some occasional remarks by the publisher," among which he observes that Fairford "is noted chiefly for its decent church, and the admirable painted glass that is in it. I had often," he proceeds, "heard this glass mentioned in common discourse, especially when I have been talking with learned and curious men, who generally agreed that it was the finest of its kind they had seen in England." Here is a testimony that the Fairford windows were not treated with "neglectful silence" by admirers of Christian art at the beginning of the last century ; but Mr. Hearne goes on to say that "the most celebrated Sir Anthony Vandyk often affirmed . . . , both to King Charles the First and others, that many of the figures were so exquisitely well done that they could not be exceeded by the best pencil. This made several curious, as well as virtuous and religious persons very solicitous about the preservation of the glass at the late Rebellion ; and yet, after all their care, some of the best figures were utterly lost, which is the reason that some defects (that are filled up with modern plain glass) appear in several places." Some years before the Rebellion, Richard Corbet, Bishop of Norwich from 1632 to 1635, celebrated the Fairford windows in a poem, which comprises the quaint lines below :—

"I knowe no painte of poetry
 Can mend such colour'd imag'ry
 In sullen inke, yet (Fayreford) I
 May relish thy fair memory.
 Such is the echoe's fainter sound,
 Such is the light when the sunn's drown'd,
 So did the fancy look upon
 The work before it was begun.
 Yet when those showes are out of sight,
 My weaker colours may delight.
 Those images doe faithfullie
 Report true feature to the eie,
 As you may think each picture was
 Some visage in a looking-glass ;
 Not a glass window face, unless
 Such as Cheapside hath, where a press
 Of painted gallants, looking out,
 Bedeck the casement rounde about.
 But these have holy phisnomy ;
 Each paine instructs the laity
 With silent eloquence ; for heere
 Devotion leads the eie, not eare,
 To note the cattechisinge paint,
 Whose easie phrase doth soe acquainte

Our sense with Gospell, that the Creede
 In such an hand the weake may reade.
 Such tipes e'en yett of virtue bee,
 And Christ as in a glass we see."⁵

The glass was treated of in a History of Fairford Church, which was published in 8vo. at Cirencester, in 1763; also in a 4to. pamphlet, entitled "An Account of the Parish of Fairford," &c., with four engravings, which appeared in 1791; and significant evidence of the popularity of this subject is afforded by the fact that the 22nd edition of a tract upon it was published at Cirencester in 1841.

The "description" in Hearne's volume was reprinted in the Cambridge Camden (now Ecclesiological) Society's "Illustrations of Monumental Brasses"⁶ in 1846, and is followed by the statement that the designs "have been attributed to Albert Durer; but, as Bigland observes, it is impossible that at the age of twenty he could have arrived at such proficiency in the art So great has been the havoc in this beautiful branch of church adornment through the parish churches of England, that we have but few specimens left, and perhaps none which for magnitude and preservation can compete with that of Fairford."

A slight sketch of the great west window at Fairford is given in the *Archæologia*.⁷ Our gifted friend and colleague, Mr. George Scharf, F.S.A., made a pilgrimage to Fairford Church in 1856, "for the express purpose," as he states, "of examining the painted glass" there, of which he gives a laudatory notice in the volume of the *Archæologia* just mentioned; and he also read a paper upon it before our Society in the April of the same year.⁸ Fairford Church was visited in the summer of 1860 by a party of the members of our Institute, under the guidance of Messrs. J. H. Parker and J. D. Niblett, and the following reference to its distin-

⁵ The Poems of Richard Corbet, late Bishop of Oxford and Norwich, &c., with Biographical Notes, and a Life of the Author, by Octavius Gilchrist, F.S.A. Fourth edition, pp. 239, 240. 8vo. 1807. This worthy and humorous prelate had a keen relish for some relaxations which were, perhaps, not quite in keeping with the "silent eloquence" of the Fairford windows. For example, Aubrey records, "His chaplain, Dr. Lushington, was a very learned and ingenious man, and they loved one another. The Bishop would

sometimes take the key of the wine-cellar, and he and his chaplain would go and lock themselves in and be merry; then first he layes down his episcopal hood, 'There layes the doctor;' then he putts off his gowne, 'There layes the bishop;' then 'twas, 'Here's to thee, Corbet;' 'Here's to thee, Lushington.'"

⁶ Pp. 124, 126. 4to. 1846.

⁷ Vol. xxxvi. plate 31, p. 386.

⁸ The Arch. Journal, vol. xiii. pp. 274, 275.

guishing decoration is made in our Journal. "According to popular tradition, the glass was taken at sea, in a vessel bound from Flanders to Italy, and the church built expressly for it; with the exception, however, of some portions of the larger figures of the Old Testament story in the lower lights, &c., the glass appears to be English, and made for the windows in which it is placed."⁹ No. CLXIII. of the *Ecclesiologist* (published by the Ecclesiological Society) contains an earnest remonstrance against the "work of destruction which, under the name of restoration, is now [1864] going on in the church of Fairford, Gloucestershire, and threatens to deprive us of the most complete collection of the Flemish glass painting of the fifteenth century now remaining in the country."¹ This elicited a reply from "Sebastian Evans," who was engaged upon its restoration. Once more, in No. CLXX. of the *Ecclesiologist*,² will be found a reprint of the account of the Fairford glass in Hearne's publication, which is prefaced by some remarks by the writer of this paper, in reference to the similarity of the design of the west window to two important ancient paintings of the School of van Eyck, of which I shall have occasion to speak in the course of these observations.

Manifestly incorrect, therefore, is Mr. Holt's statement that from the date of their insertion at Fairford the windows "have been permitted to remain utterly unrecognised" until the visit of the Archæological Association in last August. To recapitulate, it has been shown on the contrary, that even before the middle of the seventeenth century they were well known and appreciated by men of taste, and that from the beginning of the eighteenth until the present time, they have not unfrequently been commented upon both by individual art judges and learned and artistic societies in terms of commendation. What Mr. Holt in his paper terms his "preliminary reproach," and considered "too just to be either repressed or concealed," is consequently undeserved.

I have already remarked that I intend to animadvert upon only a *part* of the considerations alleged by Mr. Holt in support of his theory. For example, I will not comment upon his assertion that Albert Durer was an artist in stained glass, further than by asking for proof of this statement;³

⁹ Vol. xvii. p. 333.

¹ pp. 202, 203.

² pp. 286—289.

See Mr. Macray's Letter in Notes

neither will I offer an opinion in opposition to Mr. Holt's personal conviction respecting the "distinctively Dureresque" character of the Fairford designs, nor dispute his repudiation of the tradition that the church was built "to accommodate a set of painted windows."⁴ Doubtless there are several gentlemen present who are better qualified than myself to speak as to the designer or designers, the age, the country, the architectural indications,⁵ and the technical treatment and quality of the Fairford glass; and also to criticise those portions of Mr. Holt's paper which I shall purposely leave unanswered. The line which I propose to follow is so distinct from the above subjects as not to require its pursuer even to have seen the Fairford windows, and concerns only the main circumstantial evidences,⁶ tests, or pillars (so to speak) looming out of the haze of unsupported assertion and mere opinion, upon which Mr. Holt endeavours to support his ascription of those windows to Albert Durer.

The first of these is stated by Mr. Holt as follows: "I would . . . claim (under correction) as a special invention of Durer, found in his noble sketch of the 'Crucifixion' at Basle, and in the Fairford design of the same subject, the presence of the angel and demon receiving the souls of the penitent and impenitent thieves. I am aware that this incident has been resorted to by other painters, but I have found no example of it in German engraving, or illuminations, or in pictures at all within Durer's reach."

and Queries, No. 33, September 19, 1868.

⁴ "Contrived purposely for the reception of the glass, the plan [of Fairford Church] is necessarily somewhat cramped.

. . . The church consists of a Chancel, Nave, a Tower between them, and two Aisles, which extend without any external break to about half the length of the Chancel. This arrangement, necessary to secure the required number of windows, somewhat injures the effect of the exterior, and makes the distinction between the Chancel and Nave less marked than might have been wished." Illustrations of Monumental Brasses, p. 121.

⁵ "The architectural part of much is entirely unlike anything German of the date, though it very much resembles a good deal of English work in various parts of England. That Albert Durer,

the most advanced man of his day, should have copied detail out of fashion in his country is about as unlikely as anything not absolutely impossible." The Ecclesiologist, No. clxxxix. (Dec. 1868) p. 368.

⁶ Advanced in his Cirencester paper, and, with one exception, in a more concise and trenchant form in his letter to the Standard of Sept. 15, where they are introduced by the challenge, before referred to, thus:—"I now propose attempting to induce those who differ from me, to meet me on a few distinct and important points, which will go far to definitely settle the main question. If they can prove me to be in the wrong, no one will more readily—I may add, thankfully—admit it than I will; but if they are unable to successfully controvert my declarations, I shall assuredly claim the victory as Durer's."

In reference to this position my accomplished friend, Mr. N. H. J. Westlake (to whom we are indebted for the drawings of portions of the Fairford windows, and some other illustrations now exhibited) has remarked, in a letter to a daily paper,⁷ that the "invention" thus claimed as Durer's "was very common in Italian art" long anterior to the time of Durer, who, to say the least, could hardly have been unaware of its existence. I have not, indeed, come across "this incident" in German paintings⁸ or engravings *before* 1500, but I have brought here for your inspection a volume printed by John Knoblouch in 1508, and containing a print of the Crucifixion, in which it occurs. This engraving is the work of van Gamperlin or Gamberlin, a cotemporary of Durer, who resided chiefly at Strasbourg,⁹ and (as it may safely be concluded) never saw the Fairford Crucifixion. To this artist (or "formschneider" in Mr. Holt's vocabulary) may consequently be as reasonably assigned the merit (if any) of the "invention" as to Durer. Far less improbable, indeed, is the supposition that Durer borrowed the idea from van Gamperlin than van Gamperlin from Durer, if, as Mr. Holt admits, the first undoubted work of his in which it appears is a drawing "signed in 1514."¹ Neither van

⁷ The Standard, October 7, 1863.

⁸ That justly valued artist and archaeologist, Mr. J. G. Waller, has acquainted me with a German painting in which the above incident occurs. It is situated beneath a sculptured tympanum immediately over the south door of the church of Andernach, upon the Rhine. "The subject," writes Mr. Waller, "which is the Crucifixion, is thus treated: Christ, extended upon the Cross, is bowing the head and giving up the ghost; on His right is the figure of the Virgin, on His left that of S. John, the beloved disciple; crucified, one on each side, are also the two thieves; a figure is at the foot of each, apparently in the act of breaking their legs, whilst above, from the mouth of the good thief, an angel receives his departing soul; from that of the bad thief the same office is performed by a demon; this, however, which is on the left side, is much effaced. The figures are very small, less than a foot in height, so that there is but little room for the introduction of much detail, yet there is enough in the style of execution, and the character of the costume, to assign it to the early part of the fourteenth century."

The Gentleman's Magazine, p. 61, vol. xxxv. new series.

The Very Reverend Canon Rock, D.D., possesses a wood carving of the Crucifixion, of Flemish workmanship, and of the 15th century, which represents the same incident.

⁹ Strutt's Biographical Dictionary of Engravers, vol. i. p. 319, 4to, 1785. Bryan's Dictionary of Painters and Engravers, p. 268, royal 8vo, 1858.

¹ See Mr. Holt's Discourse delivered in Fairford Church, reported in The Builder, vol. xxvi. No. 1333, p. 616. "We had," he remarked, "a drawing by Albert Durer himself, signed in 1514, in which the Saviour was represented as crucified on the worked wood, while the thieves were on the rough wood; and here were a white child, emblematic of purity, and a black child, emblematic of sin, issuing from the heads of the repentant and of the unrepentant sinners. Now, considering, as he should strongly contend, that Albert Durer executed these [Fairford] windows somewhere about the year 1500, and that he did not make the drawing until 1514, and that he had never been in England at all, we must

Gamperlin nor Durer has, in my opinion, any just claim to it, and to assume that the latter was ignorant of early Christian art to the extent which such an attribution involves; and, moreover, to base upon this assumption the further one that Durer consequently designed, and not merely designed but actually manipulated the glass at Fairford, is a flight of fancy which appears to me to rise far above the confines of the reasonable.

Mr. Holt's next statement upon which I beg leave to comment immediately succeeds that which I have just dismissed. Referring to "the lily and the sword" in the painting of the Doom at Fairford, "issuing from the Christ in the 'Judgment-seat'—the one directed to the Virgin, the other to the John the Baptist—emblems, the one of Mercy, the other of Justice," he adds, "which I believe to be of Durer's invention, and a modification of the two swords in the *Biblia Pauperum*."

It might have been a sufficient answer to this argument to point to the noble engraving of the Last Judgment in the *Chronicon Mundi* (or the Nuremberg Chronicle) of the physician and philologist, Hardman Schedel, of 1493, but since Mr. Holt does not hesitate to ascribe the designs in that volume to Albert Durer, regardless of the statement in its colophon that they are due to Pleydenwurff and Durer's master, Wohlgenuth,² I will not linger upon it. Other examples of a similar device of the lily and the sword occur in works long prior to the time of Durer. One such appears in a picture in tempera, of the Last Judgment, ascribed to the fifteenth century, in Gloucester Cathedral, which Mr. Scharf pronounces to be "one of the most important specimens of English painting I remember to have seen."³ A Book of *Hours*⁴ in my possession, of the early part of the fifteenth century, written and limned by an English hand, and after the use of London, contains a miniature of our Lord as Judge showing His wounds, and attended by two

conclude one of two things—either that he was a vile plagiarist or that he was the inventor of these devices." It is noteworthy that crosses of "worked" and "rough wood" occur in van Gamperlin's Crucifixion.

² "Michaele Wolgemut et Wilhelmo Pleydenwurff quarum solerti acuratisimaeque animadversione tum civitatum

tum illustrium virorum figure inserte sunt." *Figurae* or *typi* is the regular printer's word for all sorts of illustrations long after Durer's time.

³ The *Archæologia*, vol. xxxvi. p. 372.

⁴ This volume is described by Canon Rock, D.D., in the *Ecclesiologist*, No. clxii. p. 125.

angels—one holding a lily branch with three white flowers on it; the other, a sword. On the former angel is inscribed “*misericordia* ;” on the latter, “*justicia*,” the words, be it observed, which are visible on labels “in the heading of the lights on each side of S. Michael,” in the Doom at Fairford. A similar representation of the angels of Justice and Mercy is given in a facsimile of two leaves in an “*Ars Moriendi*,” in T. O. Weigel’s and Dr. Ad. Zestermann’s great work on the “*Infancy of Printing in Pictures and Writing*,”⁵ which upon internal evidence those gentlemen assign to a date between 1470 and 1480.⁶ But yet more to the purpose is the circumstance that the sword and lily are figured on the left and right of the Judge in two very important pictures of the fifteenth century, and quite “within Durer’s reach,” viz., the great triptych assigned to Roger van der Weyden the elder, at Beaune in Burgundy, and the famous altar picture in the cathedral of S. Mary at Dantzic, which, indeed, the design of the east window at Fairford remarkably resembles.⁷ In regard to the second of these paintings, Mr. Holt (in a letter⁸ to a daily journal) observes upon a communication⁹ of my own, “the only portion of the letter . . . to which it is necessary I should now allude is to record the serious doubt I entertain whether the date assigned to the celebrated triptych at Dantzic is correct, or the attribution to Memline well founded.” “The date of

⁵ Die Anfänge der Druckerkunst in bild und schrift, vol. ii. p. 22. Leipzig, fol. 1866.

⁶ “The date may be inferred partly, from the hair which is combed partly back from the middle of the forehead, partly in puffs down the ears, as in Gunter Zeiner’s *Lives of the Saints*, 1472; partly, from the straight guard of the sword of the angel [of justice] as in Koberger’s *German Bible*; partly, from the glory round the Jesus Christ terminating in lilies; and partly from the long trains of the drapery. All these points considered we should place this *Ars Moriendi* between 1470 and 1480.” *Ibid.* p. 25.

⁷ “The west window,” writes Mr. Scharf, “appears to me to be of an earlier date than the rest of the glass at Fairford. It is especially interesting as exhibiting a close affinity to the frequently described picture at Dantzic. . . . The arrangement and general action of the figures, the Blessed ascending steps with the aid of S. Peter, and the violent action

of the Condemned on the opposite side, are common in both paintings. At Dantzic, the figures of the Blessed entering Paradise are entirely nude; whilst at Fairford, their habiliments, tiaras, mitres, and crowns, distinguish their former grades and position in life. At Fairford the Condemned are much more grotesque; and the demons are scaly with snouts, hideously formed limbs, such as beset S. Anthony in Martin Schongauer’s well-known engraving. A remarkable parallel exists also in the central and dignified figure of S. Michael holding the scales in one hand, and a processional cross in the other. He is fully armed, and the fashion of the armour in both instances belongs to the fifteenth century.” *Notes and Queries*, No. 38, p. 268.

⁸ Dated Sept. 4, 1868, and published in the *Standard*.

⁹ Published in the *Standard* of August 26, 1868.

this curious picture," writes Mr. Scharf, "is traceable in the centrepiece on a gravestone to the left of the figure of S. Michael. A woman wringing her hands is seated on it. The following letters are all that remain, 'Anno Domini CCCLXVII. I. A. R.' At first the date was restored 1367, but Waagen has satisfactorily shown, by the space worn away at the commencement, that there must have been an additional c."¹ This is good evidence that the picture was completed in 1467; and the supposition of its date being fifty years later, or indeed of any portion of the sixteenth century, is, for other reasons, untenable. The style of the architecture (which is free from the least trace of the Renaissance) of the splendid Pointed Gate through which the Blessed are passing into Heaven, and of the burnished golden armour of S. Michael, is sufficient to limit the date of the painting to about the beginning of the second half of the fifteenth century. It has not been my privilege to see the original picture, but I have attentively examined an excellent photograph of it. I have also studied the productions of Memlinc at Bruges, Munich, and elsewhere, and have had constantly before my eyes for many years a choice specimen of that master in my possession; and the refined and dignified expression of the countenances, and the arrangement of the draperies of the principal personages in the Dantzic picture, the elaborate finish of its details, the masterly rendering of its several groups of the Lost, and above all, the pure and devotional sentiment which pervades its entire design—all combine to form my conviction that they conclusively claim that picture either for Memlinc, or for one of his great *cotemporaries*, who was nearly akin to him in religious feeling and artistic excellence, and of the Netherlandish School.²

¹ The *Archæologia*, vol. xxxvi. p. 386, note.

² Since the above was written, I have received a letter from a gentleman than whom no one is better acquainted with the literature of Flemish art, Mr. W. H. James Weale, of Bruges, in which he observes: "The alleged discovery by me in the Archives here of a document in which Thierry Bouts engages to paint the picture of the Last Judgment now at Dantzic, for a Milanese nobleman, is a myth which has been going the round of the papers, and which I have already contra-

dicted several times, *e.g.*, in the *Chronique des Arts* of 27th September. The composition of the picture is very unlike any of the authenticated works of Bouts; as to the colouring and technical execution of the work, I cannot speak, not having seen the Dantzic picture. You are doubtless aware that this picture has been attributed in turn to almost all our great masters, and affords perhaps one of the very best examples of the little value that should be attached to attributions. The old tradition at Dantzic gives it to the brothers van Eyck. In 1807 it was

Mr. Holt continues, "In like manner I protest against the accustomed assumption of Dr. Waagen that the picture at Beaune, which I have very carefully examined, . . . was painted by Roger van der Weyden the elder, my belief being . . . that it was not painted until the early part of

carried off by the French, and exhibited at Paris as a work of Albert van Ouwater. When recovered from the French in 1815, it was exhibited at Berlin, and in Schadow's Catalogue figures as being by Michael Wohlgemuth! Mr. Hirt, in an article on the exhibition, assigned it to Hugo van der Goes, on the ground of its resemblance to the authentic picture by that master in the church of Santa Maria Nuova, Florence. In 1814, Waagen had compared the picture with van Eyck's altar-piece from Ghent, then also at Paris, and in his work on the van Eycks, published in 1822, declared it to be the work of John. Passavant in 1841, and Kugler in 1842, attribute it to Albert van Ouwater. In 1843, Hotho assigned it to Memlinc. Lübke, in his edition of Kugler's Handbook, published in 1861, adopts the opinion. Waagen, in his Handbook of Painting (English edition, 1860, p. 99), calls it the most important work of Memlinc that has descended to us, while in the Belgian edition (1863, p. 147) he adds that the vigour and transparency of the colouring reveal the influence of Thierry Stuerbout (he means Bouts). Now here are, I hope, attributions enough to deter anyone from adding to the confusion by venturing on another without proofs in support thereof.

"Now for some facts as to the Dantzig picture. In the early spring of 1473 there sailed from Bruges a galley named the *Saint Thomas*, belonging to Thomas Portunari, the agent of the Medici here. This vessel was captured on the high seas by the *Peter von Dantzig*, Captain Paul Benecke, who conveyed his prize home. On board the *Saint Thomas* was found the triptych now at Dantzig. Portunari used every means in his power to get back his property, but he appears to have been most especially anxious about the picture. Why? I shall attempt an answer presently; but before doing so, let us turn to the picture itself, and examine the armorial bearings thereon represented. Beside the portrait of the personage for whom the triptych was painted (exterior of right wing) is a shield: Or, a lion rampant sable, debruised by a bend argent; and beside his wife's portrait another shield: Gules, a lion rampant or, debruised by a bend

azure charged with three pincers of the second; in sinister chief, this remarkable device, a pair of compasses surmounted by a crown or, and interlaced with a scroll argent, bearing the motto, *POUR NON FALLIR*. These last are undoubtedly the arms of the Milanese family Castiglione, but no one has yet discovered the donor's. Was there in Italy at that time any illegitimate descendant of a Count of Flanders married to a lady of the Castiglione family? The picture having been executed for Portunari as agent of the persons whose portraits are on the wings, it is not likely that he would have detained it at Bruges for nine and a-half years; this objection is fatal to the attribution to Roger de la Pasture (van der Weyden) who died 16th June, 1464. The composition, drawing of the figures, and especially the peculiar way of drawing the feet, is unlike Memlinc. Besides, this master was living at Bruges, and might easily have been commissioned to repaint the triptych. But if we suppose it to be by Hugo van der Goes, then the reason of Portunari's extreme anxiety to recover the picture becomes evident. That artist had determined on giving up his profession and seeking retirement in the cloister, and as soon as he had completed the engagements he had already contracted, he joined the community of Rouge Cloître, where he was professed in 1476, after having of course spent a year there as novice, and probably some months as postulant. In 1474, Portunari doubtless knew well that there was no chance of repairing his loss. The Dantzig artist flourished between Roger and Memlinc, and if he is not van der Goes, he must be an unknown master." Our distinguished colleague, Mr. John Gough Nichols, F.S.A., informs me that the arms of the family of Castiglione of Milan, are Gules, a lion rampant argent, holding a castle or. Crest, a demi-wild man proper, holding a compass or. Motto, "*Pour non faillir*." "This quite supports," he writes, "Mr. Weale's assigning of the similar coat to a Castiglione, but I could trace in the pedigree of the family no member that had settled in the Netherlands, or in Germany at the requisite period."

the 16th century ; and if I am correct in my assumption, it leaves the claim I have advanced of Durer being the inventor of the lily-branch and sword in the representation of the Last Judgment untouched."

It is, I am aware, just now the fashion to underrate the authority of the late Professor Waagen ; but I believe that few, if any, of the art-critics of our days have better understood the works of the painters of the *early* Italian, Flemish, and German schools, or had a fuller appreciation of their characteristic charms. But Dr. Waagen's "assumption" agrees with the opinion of Messrs. Crowe and Cavalcaselle, who state that "the noblest patron of" Roger van der Weyden "was the Chancellor Rollin, who founded the hospital of Beaune, in remembrance of the desolating plague that ravaged that city. Pope Eugenius the Fourth had granted his request to found the building under the invocation of S. Anthony, and he laid its first stone in 1443 (Gandelot, *Hist. de Beaune*, 4to., Dijon, 1772, p. 111). Van der Weyden painted for him, and for the adornment of that edifice, the largest altar-piece now extant, perhaps with the exception of the Agnus Dei of S. Bavon ; Rollin and his wife, Guigonne de Salins, figuring therein as donors."³ As reasonably, apart from external evidence, and judging solely from its design, colouring, costume, architectural details, and the like, might the van Eycks' grand picture, just named, of the "Adoration of the Apocalyptic Lamb" be ascribed, *e.g.*, to Mabuse, as the triptych at Beaune to any artist of the 16th century. The pure Pointed form of the Portal of Heaven on its right wing of itself attests (as in the Dantzig picture) to the date ordinarily assigned to it, viz. about 1447. I think that I have now disposed of Mr. Holt's assertion that the Fairford glass is the handiwork of Durer, because the lily and the sword, on the right and left of our Lord on His throne of judgment, is the exclusive invention of the painter, and are portrayed in the Fairford Doom.

In a letter, to which reference has been made, published more lately than his paper read at Cirencester,⁴ Mr. Holt writes : "I declare that the windows in Fairford church, which represent 'The Meeting of Joachim and Anne at

³ The Early Flemish Painters, by J. A. Crowe, and G. B. Cavalcaselle, c. viii.

p. 163, 8vo. 1857.

⁴ See the Standard, Sept. 15.

the Golden Gate,' 'The Birth of the Virgin,' 'Her Presentation in the Temple,' and 'Her Marriage to Joseph,' are the original inventions of Albrecht Durer, and had never been represented by any painter than himself prior to 1500."

Surely the word "German," which, upon second thoughts or when better informed, Mr. Holt inserted before "painter" in the foregoing paragraph, denotes a virtual admission that Durer did not *invent* the pictures of the above incidents in the Fairford glass. The same subjects, I need hardly remark, are of frequent occurrence in early Italian art; and to come nearer home, are, *e.g.*, figured in the extreme westerly (almost, if not quite cotemporary)⁵ windows on the north side of King's College chapel, Cambridge. The "Golden Legende" (in my possession), printed by Caxton in 1483, contains on folio 284 a woodcut of the "Nativity of our Blessed Lady." A "Missale Parisiense," printed on vellum by John Prato in 1489, is adorned with coloured pictures of the Birth and Marriage of the Blessed Virgin, and a Horæ, printed on vellum by Simon Vostre a little later, with vignettes of the Meeting of Joachim and S. Anne, and of the Nativity and Presentation of S. Mary, and her Espousals with S. Joseph. Mr. Westlake has reminded me that her Marriage is represented in a painting attributed by Dr. Waagen to the elder van der Weyden, in the Berlin Museum, which I remember to have seen, and have indeed described in the Ecclesiologist.⁶ Its appearance in this picture has a strong *indirect* bearing upon Mr. Holt's declaration, because it is well known that under the influence of its author "the realistic tendency of the van Eycks pervaded all Germany," and Martin Schön, the greatest German master of the 15th century, a very old friend of Durer's father, and "Durer's idol,"⁷ is historically known to

⁵ In reference to the window which contains the painting of the Marriage of the Blessed Virgin, Mr. Scharf inquires, "May not this window prove to be a memorial window, referring to the Queen, or the King's sister, who died in 1503?" The Archaeological Journal, vol. xiii. p. 49. Concerning the above design, the same gentleman also observes: "The draperies are angular, but simple and well arranged, partaking more of the early Florentine character, with minute attention also to the costume of the

painter's time, which seems to have been about the close of the fifteenth century." Ibid. vol. xii. p. 368.

⁶ Vol. xiii. p. 372. The picture represents the Birth of S. John Baptist, contained in a pointed arch in which is painted in chiaroscuro, with exquisite finish and minuteness, among other subjects, the "Marriage" mentioned in the text.

⁷ See Mr. Holt's Discourse in The Builder, vol. xxvi. No. 1333, p. 615.

have been his pupil.⁸ In *direct* contradiction of Mr. Holt's statement, I may observe that the chapel of S. Maurice at Nuremberg contains a picture, on a gold ground, of the Nativity of S. Mary, by a Cologne painter who, according to inscriptions on his works, flourished from 1463 to 1480, and who, from one of his principal productions (a representation of the closing scenes of our Lord's Life in eight compartments, once in the possession of M. Lyversberg), is usually designated the "Master of the Lyversberg Passion." In the Munich Gallery, among other specimens of this artist, are paintings of the Marriage of the Blessed Virgin and of the Meeting of Joachim and S. Anne.⁹ Once more, in the Städel Museum, at Frankfort on the Maine, is a large altarpicture by Conrad Fyoll (of whom notices extend from 1461 to 1476),¹ in the central compartment of which is pictured the family of S. Anne; on the wings, the Birth and Decease of the Blessed Virgin.²

The next evidence advanced by Mr. Holt is, that the "lettering" in the scrolls of the Fairford windows "is in the identical character invented by Durer, and still known to printers as 'Albert Durer's Alphabet.'" The answer to this statement briefly is that the peculiarity of Durer's letters consists in their flat or square headings, which, in combination, present a series of rectangular forms; whereas, those at Fairford, on the contrary, are irregular in character, and their heads are not infrequently arched or semi-circular.³

The last evidence or argument alleged by Mr. Holt is ushered by him as follows: "I have reserved to the close of my paper an argument which I may call my private and peculiar property, for it turns on a view which has never yet been publicly propounded, and it is pretty safe to be sharply contested." He then *assumes* that Durer "was

⁸ Handbook of Painting. Flemish and German Schools, vol. i. p. 90.

⁹ They are numbered respectively, 20 and 32, Cabinet II., in the "Catalogue des tableaux de la Pinacothèque royale à Munich," 1858. The same collection contains a picture (No. 6, Salle I.), by the elder Holbein, of the Presentation of S. Mary.

¹ Passavant, Kunstblatt, No. 101, 1841.

² Handbook of Painting. Flemish and German Schools, vol. i. p. 30.

³ Mr. J. G. Waller remarks: "Among the many details that have been appealed

to to prove these works to be by A. Durer are the scroll inscriptions. . . .

We are told they exactly correspond with the alphabet called A. Durer's. I plead to an ignorance of this special alphabet, but having had thirty years' experience of Mediæval alphabets, and possessing a collection of inscriptions from the thirteenth to the seventeenth century, I failed to see any speciality whatever beyond that perfectly familiar to me." The Builder, vol. xxvi. No. 1341, p. 764.

largely concerned in the designing and engraving on wood of the cuts" in a "set of German books containing Scriptural designs," which "were issued from the press of Anthony Koberger, the greatest Nuremberg printer and Durer's god-father;" and he proceeds to say, "there is found in them, only in them, and only between 1490 and 1500, the time within which the designing of the Fairford windows must fall, several peculiar forms of the nimbi of the Divinity. . . . You will find these nimbi—unique, remember—never occurring except in this set of books, and within this narrow interval of dates,—repeatedly in the Fairford windows.⁴ I know no other example of it in this country. If there be none, I maintain that it connects these windows with the designer of these woodcuts. Hence the importance of my view that the designer was Albert Durer. I may say that I had arrived at this conclusion years before I ever saw the Fairford windows. The Nuremberg nimbus ['used by nobody but Durer, and by him only for ten years—between 1490 and 1500'],⁵ therefore, as I may call it, came upon me, when I found it at Fairford, with all the force of a clinching blow." I will not dispute Mr. Holt's attribution of the designs and engravings in the books in question to Albert Durer (although I feel persuaded that the principal illustrations in the noblest of them, the Nuremberg Chronicle, are Wohlgemuth's), because I submit that the "force" of the "clinching blow" upon which Mr. Holt so much depends, may be, and is, annihilated by the consideration that the Nuremberg, or, correctly and technically, the cruciform fleur-de-lys nimbus, is neither confined to "the set of books," nor "within" the "narrow interval of dates," mentioned by Mr. Holt. The Nuremberg Chronicle lies on the table for the inspection of the nimbi figured in its engravings, which exhibit examples of the fleur-de-lys in (what I may term) its primitive and simple, and, as space allowed, its decorated or efflorescent forms. By the kindness of Mr. Westlake I am able also to exhibit exact copies of the nimbus in the Fairford windows. The nimbus, however, both of the Nuremberg Chronicle and of the Fairford windows (or specimens so

⁴ "I declare that Albrecht Durer invented the "Nimbi" which designate the Trinity in the Fairford windows, and that no painter except himself ever used them

prior to 1500." Mr. Holt's letter in the Standard, Sept. 15.

⁵ Discourse in The Builder, vol. xxvi. No. 1333, p. 616.

nearly like it as to indicate that they are of the same family) will be found, for instance in England, on a "Trinity" belonging to a brass⁶ at Childrey, Berkshire; and in the painting, before alluded to, of the Doom in Gloucester Cathedral: in a French miniature of the 15th century, representing in human form the three Persons of the ever Blessed Trinity, of which a representation is given by Didron;⁷ in the engraving in the work by Weigel and Zestermann, to which I have invited your attention; in the tomes of an eminent French printer, Antoine Verard,⁸ who began to flourish in 1480; and in the books which I have brought from my own library for your examination, and which I will mention in the order in which they were given to the world. I. Devout Prayers on the Passyon of God, in early English verse, with rude paintings on every page, MS. cir. 1450; II. Missale Parisiense (to which I have already referred), printed in Paris in 1489; III. In die Innocencium Sermo pro Episcopo puerorum, printed by Wynkyn de Worde, before 1496;⁹ IV. Mons perfectionis, otherwyse in Englysshe the hylle of Perfectyon, 2nd ed., printed by W. de Worde in 1501; V. The volume of engravings illustrative of the Life of Christ (comprising the Crucifixion by van Gamperlin, and) printed at Strasbourg¹ in 1508; VI. The Pater Noster, Ave, and Credo, without place, name, and date, but from the press of W. de

⁶ In memory of Jone, daughter of Thomas Walround, married to Robert Strangbow. For my knowledge of this fact I am indebted to the kindness of Mr. Waller, who says, "the date is partly gone; from what remains it was probably 1497 or 1507, but from the character of the brass most likely the former." The "Trinity" in question is figured in the Gentleman's Magazine, p. 579, vol. xxxii. new series.

⁷ Iconographie Chrétienne. Histoire de Dieu. Plate 150, p. 604. Paris, 4to., 1843.

⁸ See Dibdin's Bibliographical Decameron, vol. ii. p. 26, where will be found two facsimiles of Verard's engravings, in which the fleur-de-lys nimbus is represented.

⁹ This volume is presumed to be unique. Dibdin described it when in Heber's possession. (Typographical Antiquities, &c., vol. ii. p. 379, 4to, 1812.) That it was printed before 1496, appears from the fact of its containing a request to pray for the soul of Kemp, Bishop of

London, who deceased in 1489; and his successor Hill in 1495. A leaf with a print of the Crucifixion (in which appears the fleur-de-lys nimbus), concludes the tract. The same print occurs in the other volumes from the press of W. de Worde, mentioned above. As in van Gamperlin's engraving, the cross of our Lord is of "worked," and the crosses of the thieves are of "rough wood." Mr. J. G. Nichols has undertaken to edit the Sermon for the Camden Society.

¹ "There is a very interesting class of books of Strasbourg and Mayence, in which this nimbus is so common as to occur many times in the same volume. In the Hortulus Animæ, J. Schöffers, 1516, we have the very same form of fleur-de-lys nimbus that occurs in the Fairford designs: notably so in the Last Judgment, where the lily and sword occur, and our Lord, as in the west window, has the earth, with its cities portrayed on it, for His footstool." The Ecclesiologist, No. clxxxix. pp. 365, 366.

Worde, cir. 1509 ; VII. Missale Trajectense, printed by John Severin at Leyden, in 1514 ; VIII. A single Sermon by Martin Luther, printed in 1523 ;² IX. An imperfect black letter English treatise, containing woodcuts of the xv. "tokens" of the coming of the Last Day ; X. The boke callyd the Myrroure of oure Lady very necessary for all relygyous persones, printed by Richard Fawkes in 1530 ; and XI. The Myrroure or Glasse of Christe's Passion, printed by Robert Redman, in 1534. In all the volumes I have named occurs, I repeat, the fleur-de-lys nimbus of the Nuremberg Chronicle and the Fairford glass ; not one of them belongs to Mr. Holt's series of books, and more than one bear dates prior to 1490 and subsequent to 1500. The ease with which I have provided these specimens satisfies me that many more might readily be produced ; two or three, however, are more than enough to prove that the occurrence of the Nuremberg or fleur-de-lys nimbus in the windows at Fairford, so far from having "all the force of a clinching blow," has really not a feather's weight towards the affiliation of those windows upon Albert Durer. With this remark I bring my criticism upon Mr. Holt's paper to a close. I believe I have fairly met him on (to cite his own words) the "few distinct and important points, which will go far to definitely settle the main question," and I submit that I have not inconclusively "controverted" his "declarations."³

NOTE.—The foregoing Discourse and the discussion consequent upon its delivery, have borne fruit in two elaborate articles, on the Fairford windows, by that able and judicious art critic, the Rev. J. C. Jackson.⁴ In its original form, it concluded with a few considerations in support of the theory, that some of the designs on the glass at Fairford may possibly have been made by Hugo van der Goes ; a conjecture which, perhaps, is countenanced by the admitted resemblance of the Doom at Fairford to the altar picture at Dantzic, which Mr. Westlake assigns to the above

² Entitled Ein Sermon Doctor Martini Luthers Nuf das Euangelion Jo. x. Von dem guten hyrten. Durch yn uberlesin. MDXXIII. Above this title is a woodcut of a wolf worrying some sheep whose shepherd is running away ; at its foot is another, of our Saviour carrying a lamb

upon his left shoulder, and both our Lord and the lamb have fleur-de-lys nimbs.

³ Mr. Holt's Letter in the Standard, Sept. 15, 1868.

⁴ See The Ecclesiologist, No. clxxxix., and the Building News of Dec. 4, 1868.

master.⁵ In the "Builder" of Nov. 7, 1868, Mr. John R. Clayton attributed that painting to Memlinc, and was contradicted by the statement that Mr. Weale had lately met with a document in which Thierry Bouts engages to paint that picture for a Milanese nobleman. My inquiry of Mr. Weale, in regard to the correctness of this assertion, was answered by the communication which is printed in a preceding note. Close as is the likeness of the Last Judgment at Fairford to that at Dantzic, the Fairford *Crucifixion* as nearly resembles an important picture in the Brussels Gallery, to which attention has recently been directed by Mr. Westlake. "The picture," he observes, "is numbered 84 in the catalogue, and is a representation of the Crucifixion, with other scenes in the back-ground. It has the A of the Fairford work, on a blue banner, on the dexter side (not the A of Albert Durer or Aldegraver, as given in the article in the Gentleman's Magazine by Mr. Tom Taylor)."⁶ The following are its "points of similarity" to the Fairford Crucifixion. I. The floriated nimbus of our Lord upon the Cross. II. The good and bad angels over the Thieves. III. The planed and rough wood crosses. IV. The arrangements of the angels' heads, plain to the ears and then commencing to curl; and the manner of their draperies. V. The face, figure, and costume of the Blessed Virgin. VI. The armour and general costume. VII. The sentiment, tone of colour, and style of composition. "At one time," says Mr. Westlake, "the picture was attributed to Aldegraver, on account of the signature. This every critic now acknowledges to be a mistake, and I have some sketches of glass designed by that artist, which bear no resemblance whatever to the picture." It was in the Gallery of M. Weyer, of Cologne, and purchased at his sale for the Brussels Museum. Mr. Weale, who assigns to it the date of cir. 1485, remarks:—"Cette composition est très-remarquable; les groupes, surtout ceux des cavaliers à droite de la Croix, et des saintes femmes, sont disposés avec beaucoup d'habileté et témoignent du talent original de son auteur; et si le dessin manque sous le rapport des proportions anatomiques (têtes trop grandes et bras trop courts), celui des draperies et des détails ne laisse rien à désirer; le coloris, d'un éclat

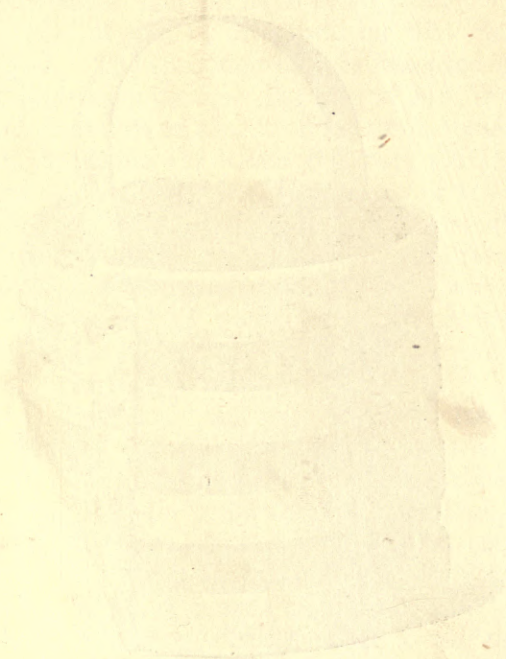
⁵ The Standard, Oct 7, 1868.

⁶ The Builder, vol. xxvii., no. 1353, p. 27.

merveilleux, éblouit par sa splendeur, et le sentiment profond qui y règne rend ce tableau digne d'occuper un haut rang parmi les productions de l'École du Bas-Rhin. Au commencement de ce siècle, il ornait l'église de Richterich, près d'Aix-la-Chapelle, dont la fabrique ignorante le vendit au général Ruhl von Lilienstern, qui le légua au ministre Von Schleiniz, de qui M. Weyer l'acheta."⁷

⁷ Notice sur la Collection de Tableaux anciens, faisant partie de la Galerie de M. J. P. Weyer, Architecte Honoraire de la ville de Cologne et Chevalier de l'Ordre

Royal de Léopold de Belgique, par W. H. James Weale, p. 18. Bruges, 8vo. 1865.





Saxon *Situla* found at the Fairford Cemetery, Gloucestershire, about 1855.

Height 4 inches ; diameter $4\frac{1}{2}$ inches.

In the collection of Professor James Buckman, F.G.S., F.L.S., &c.

SAXON SITULA FOUND AT FAIRFORD, GLOUCESTERSHIRE.

By Professor JAMES BUCKMAN, F.G.S., F.L.S., &c.

THIS well preserved example of the *Situla*, which was exhibited at the Dorchester meeting of the Archæological Institute in 1865, was obtained about ten years since from the Fairford Graves, and seems to be very much like another figured by Mr. Wylie, in his work on that Saxon Burial place, in 1852. The specimen here represented was dug up by one of the cottagers near the site of Mr. Wylie's excavations, and doubtless in a part of the same cemetery.

As usual the bands (of which there are four), the handle and fittings, are of "bronze"—probably a tolerably pure oxydised copper. The delicately formed handle and the upright shafts to which it is affixed are ornamented with rows of impressed dots. This metal-work serves to band together eight staves of wood, all of which are, as it is believed, of some material resembling cedar, and still in a fine state of preservation.

This example is four inches in height. Its diameter is four and a quarter inches. The thinness of the metal-work and of the staves seems to point to the conclusion that the *Situla* was much lighter in its construction than is generally supposed, so much so that we are led to conclude that the example under consideration could in its perfect state scarcely weigh so much as four ounces.

There has been much discussion as to the use of these small buckets, the general conclusion perhaps being that they were drinking cups for ale or mead.

Akerman, however, in his "Remains of Pagan Saxondom" comes to the conclusion that these buckets "were intended to hold food and not drink," and he points to the fact that the Abbé Cochet found a bucket containing a glass cup at Envermeu,¹ in Normandy, and that in the Frank graves at Selzen glass drinking cups were found in a similar position. At Fairford was found a glass cup of most exquisite form,

¹ Figured in "La Normandie Souterraine," by the Abbé Cochet; and in Mr. Wright's Essays on Archæological Subjects, vol. i., p. 156.

and Akerman, in the work already cited, has figured some beautifully formed glasses from Reculver and Coombe, in Kent; these, as is usual with the Saxon cups, were not made with feet. The fashion of the base was such, that the glass could scarcely, if in any instance, be placed erect. Amongst ourselves there have been occasions when no "heel-taps" were allowed; doubtless this custom may have descended from our Saxon forefathers.

We conclude, then, that these elegant glass drinking-cups must have been so costly as necessarily to have been used by the more refined people, who, however dry they may drain their cups, would hardly like the cloth on the board to be stained from the inverted cup.

We have seen that at least our bucket is light and elegant in structure, made, too, of a scented wood, in both of which points we are inclined to think that most of these buckets agree. We cannot therefore view the bucket as having been intended for use as a drinking cup, and still less, as suggested by our friend Akerman, that they "were used for spoon meat, and are, in fact, porringers."²

We believe that these buckets were employed simply to receive the inverted drinking-cup, and the finding them together, as above stated, may favour our conjecture. If they were themselves drinking-cups it would have been impossible to have lifted them by the handle, as this part is simply made of the thinnest possible band of metal. The like objection will weigh against the porringer theory.

Still the mere bucket could have been supported by its handle, and probably with the glass cup in it, but we have a notion that these buckets may have been placed on the table much in the same manner as our modern glass wine-coolers, and the drinking-glass therein inverted. We often hear that "there is nothing new under the sun," and we have sat down to dinner where the elegantly cut sherry glasses had no stands, and were inverted in the wine-cooler, much as we suppose was the case with the bucket and glass of a refined Saxon.³

² Pagan Saxondom, p. 56.

³ Examples of the very curious Saxon vessels noticed above have been figured in this Journal, in a memoir by the late Mr. Deck, on Remains found at Little Wilbraham, Cambridgeshire; Arch. Journ., vol. vii., and in the late Lord Bray-

brooke's Account of a cemetery on Linton Heath, vol. xi. See also his "Saxon Obsequies;" the "Inventorium Sepulchrale," by Mr. Roach Smith; Archaeological Essays, by Mr. Thomas Wright, vol. i., pp. 138, and 153—157.

NOTES ON THE CONTENTS OF SOME OF THE ARMOURIES IN THE SWISS ARSENALS.

By Major-General LEFROY, R.A., F.R.S.

THE common handbooks of Switzerland allude slightly to the collections of old weapons and armour which are to be seen in the capitals of several of the cantons, but they are so little known to tourists in general, that I will endeavour to embody in this short paper a few notes taken on different visits, in the hope that Archæologists may spare a few hours from the great attractions of nature, to inquire their way to the State Arsenals (not always easy to discover) and make these collections the subject of a more deliberate and critical examination—for which every facility is given by the old soldiers in charge of them.

The great quantity of genuine weapons of the fifteenth century, relics of the Burgundian wars, will attract the first attention: they are derived from the fields of Grandson and Morat, 1475—6, in which the chivalry of Charles le Téméraire suffered such signal defeat at the hands of the patriot levies; but we find early fire-arms, rifles, breech-loading cannon, arms, armour, and articles of equipment of all periods, often in quantities which make the collections armouries rather than museums. An Austrian breech-loading field-piece at Zürich, dated 1611, bears the quaint inscription—

Ich Bin ein jungf frau
Wel gestalt Welchen
Ich kuss der wirt nit Mt.

Freely translated,

I am a maiden fair and bold,
Who tastes my kisses grows not old.

It is rifled in 18 grooves, calibre 1·86 in., length 6 ft., and has a somewhat unusual breech mechanism. The end of the barrel is closed by a plug, which is hollowed to contain

the charge of powder, and fixed in its place by a strong lateral bolt that passes through both sides of the gun. Another piece, dated 1674, is curiously contrived "a double

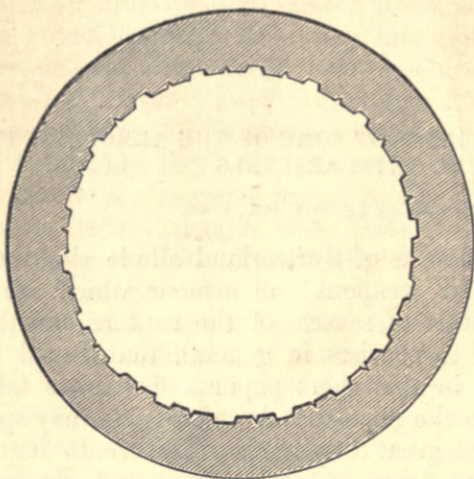


Fig. 1.

Fig. 1.—Muzzle-section of the rifled breech-loading piece at Zürich, dated 1611.



Fig. 2.

Fig. 2.—Rifle at Zürich, dated 1621.

debt to pay." Like Caliban it hath two voices, the cascade or breech end is a little prolonged beyond the usual dimensions, and, being bored out, discharges a shell, like a mortar. Here too those philosophers who delight in proclaiming that "there is nothing new under the sun," will be confirmed by finding a breech-loading rifled gun dated 1614, in which the breech is closed by a moveable block with the vent in it, somewhat like the Armstrong system. It is also a poly-groove, in the jargon of the present day, having 31 grooves, calibre 0.95 in.; another recent proposal was anticipated by a piece called an *Orgue*, bearing the date 1742, and the name *Johanes Weller, auctor et inventor*, in which ten chambers arranged in a straight transverse block are brought in succession to the barrel by moving a winch, an idea since more elegantly worked out in the common American revolver. The earliest dated rifled harquebus which I could discover is only of 1607. It is rifled in 34 fine angular grooves, calibre 0.65, barrel 49.6 in. long, the lock a combination of wheel and match. There is another of 1621. (Fig. 2.)

Few visitors will see unmoved in this collection the arms worn, or said to have been worn, by Ulric Zuingle when

slain in 1531; namely, a straight two-edged sword, and a battle-axe which testifies to his advanced ideas in secular no less than theological subjects, for it is bored out to make it at the same time a fire-arm—a combination not uncommon in Oriental weapons, but a very bad one. The lock is wanting. Perhaps more genuine, and also very interesting, is a complete buff suit of a Swedish Rittmeister of the period of Gustavus, about 1650. He carries a rifled carbine.

We find in this collection a large number of *marteaux* or horsemen's hammers of a peculiar type, intended to be carried at the belt. They would appear to have been

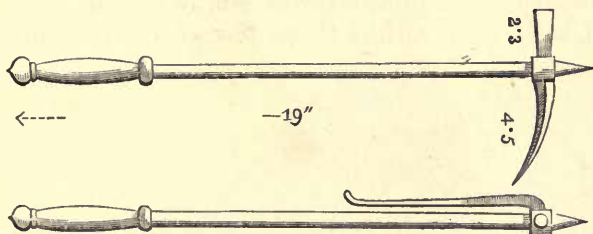


Fig. 3.—Horseman's hammer. Zurich Armoury.

specifically made for penetrating the joints of armour, being too light to inflict much injury through it. The annexed cut represents one. Among the plug and socket bayonets are several of unusual forms. As for huge two-handed swords, *morgensterns*, *partizans*, and *halberts* of every type, the walls are loaded with them, and doubtless a minute examination would furnish dates and marks of real interest.

The collection at Lucerne is smaller. A portion of the robe of Queen Agnes of Hungary, of the early part of the fourteenth century, is preserved here, labelled, "*Portio modica vestium Reginæ Agnetis in monasterio Kœnigsfelden sepultæ e flavo et nigro variegata.*" And, like the very fine Byzantine silk of the sixth or seventh century at Chur, it is highly worth the attention of any one interested in textile fabrics. But the arms are not so fine as those at Zurich. It exhibits, however, a very fine sword, bearing the name H. IOHANES SCHRICKER and the motto IST GOT MIT VNS VER WIL VIDER VNS. 1529: the hilt is a beautiful work of art, and it comes from a family which claimed to be descended from William Tell. Those who deny William Tell's his-

torical existence will perhaps not accept this as a proof of it. We find here, further, a great number of cross-bows, with arrows in bundles, and, as usual, the great Swiss two-handed swords of the sixteenth century, one of them dated 1584 ; others, which are long-handled but scarcely two-handed, bear that unexplained inscription *A N N H M H*, which has puzzled so many collectors. There are here but few fire-arms, but among them is a richly decorated wheel-lock dag rifled in eight grooves, of the beginning of the seventeenth century.

We may now proceed to Berne, the only one of the collections of which any catalogue has been printed. The punishment of decapitation was continued in some of the Swiss Cantons to within these few years, and one of the

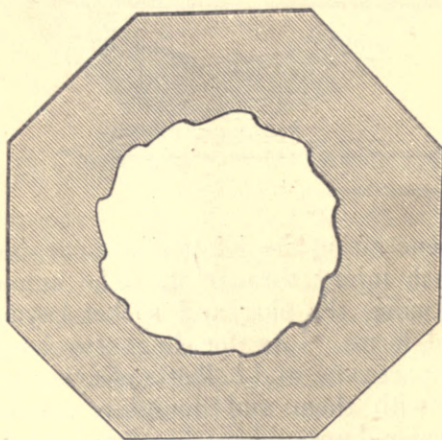


Fig. 4.

Fig. 4.—Berne Armoury : breech-loading rifled gun of iron, with trunnions ; quick twist. Remarkable for the form of the grooves.

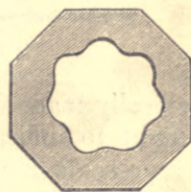
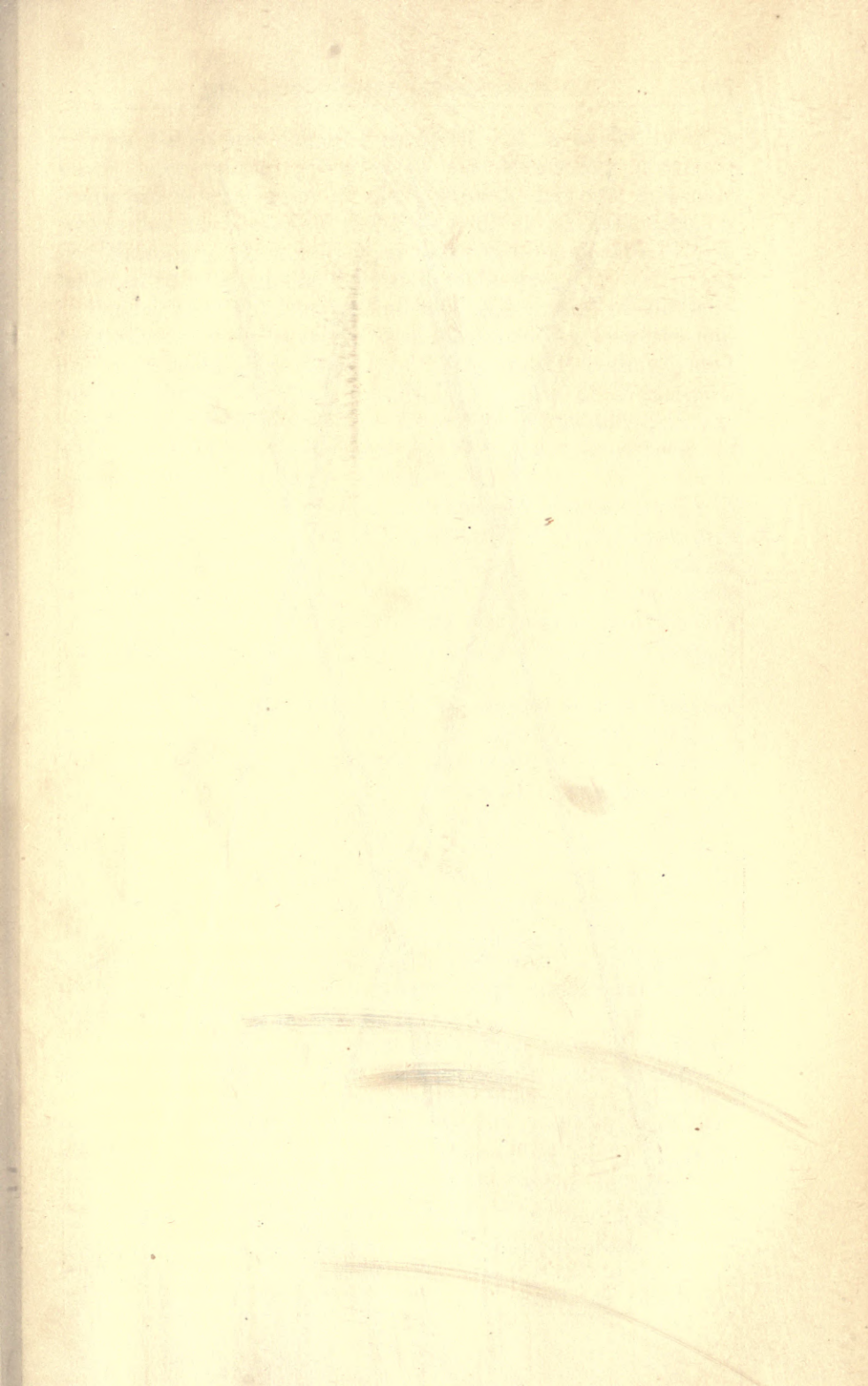


Fig. 5.

Fig. 5.—Heavy match-lock rifle with wheel lock, called Burgundian.

first objects in this museum is an array of headsman's swords, each of which is affirmed to have cut off 100 heads. The number has a poetical completeness about it, which suggests a doubt of its literal truth. It is asserted to have been customary, when a sword had completed that tale, to set it aside. We have here a rare variety of the two-hand weapon—a curved sabre with flamboyant edge. The ordinary two-hand swords of the sixteenth century are very numerous.

The collection contains several suits of armour, one of them attributed to Berchthold von Zœhringen, by whom the



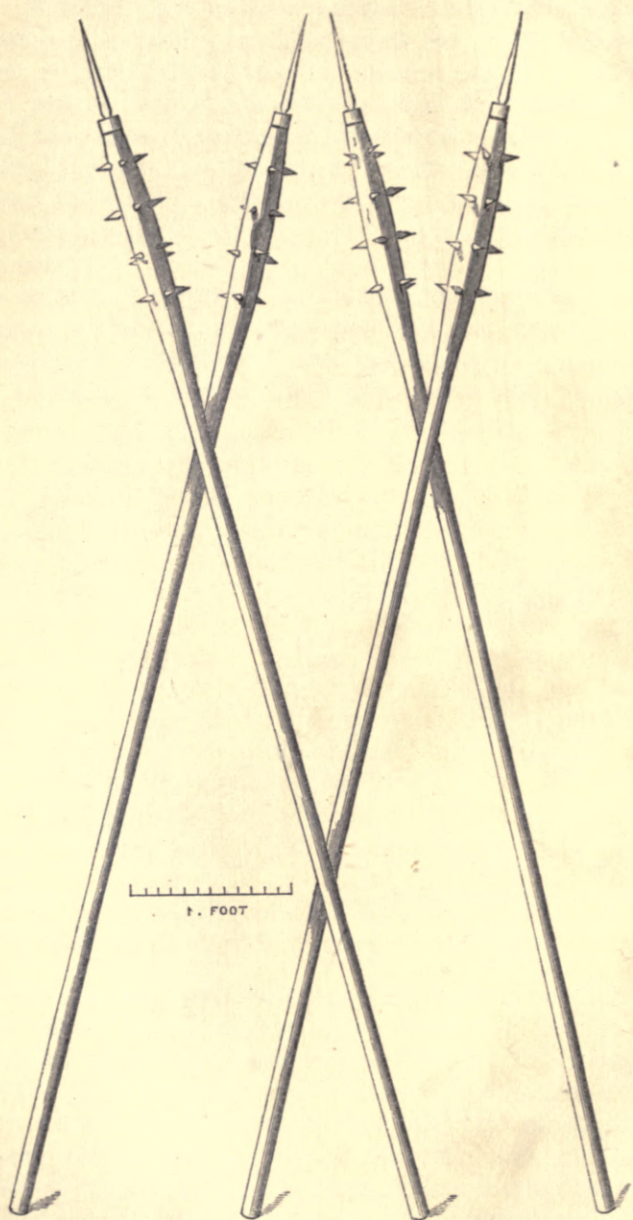


Fig. 6.—Morning-stars, Museum of Artillery, Woolwich. From the Berne Armoury.

city of Berne was founded in 1346. It is evidently of a much later period, probably of the succeeding century; there are several suits of the sixteenth century, and one, which was discovered in the hollow of an old oak tree on the Bramberg, may date from even the fourteenth. It is believed to be a relic of the battle of Laupen.

Among the fire-arms we find a "hand-gonne" of the fourteenth century on its oaken stock in excellent preservation, and a considerable number of early breech-loading rifled pieces, several of which exhibit the germs of mechanical contrivances which have been the subject of modern patents. The subjoined woodcuts show the rifling of two of them, of the seventeenth century. (Figs. 4, 5.)

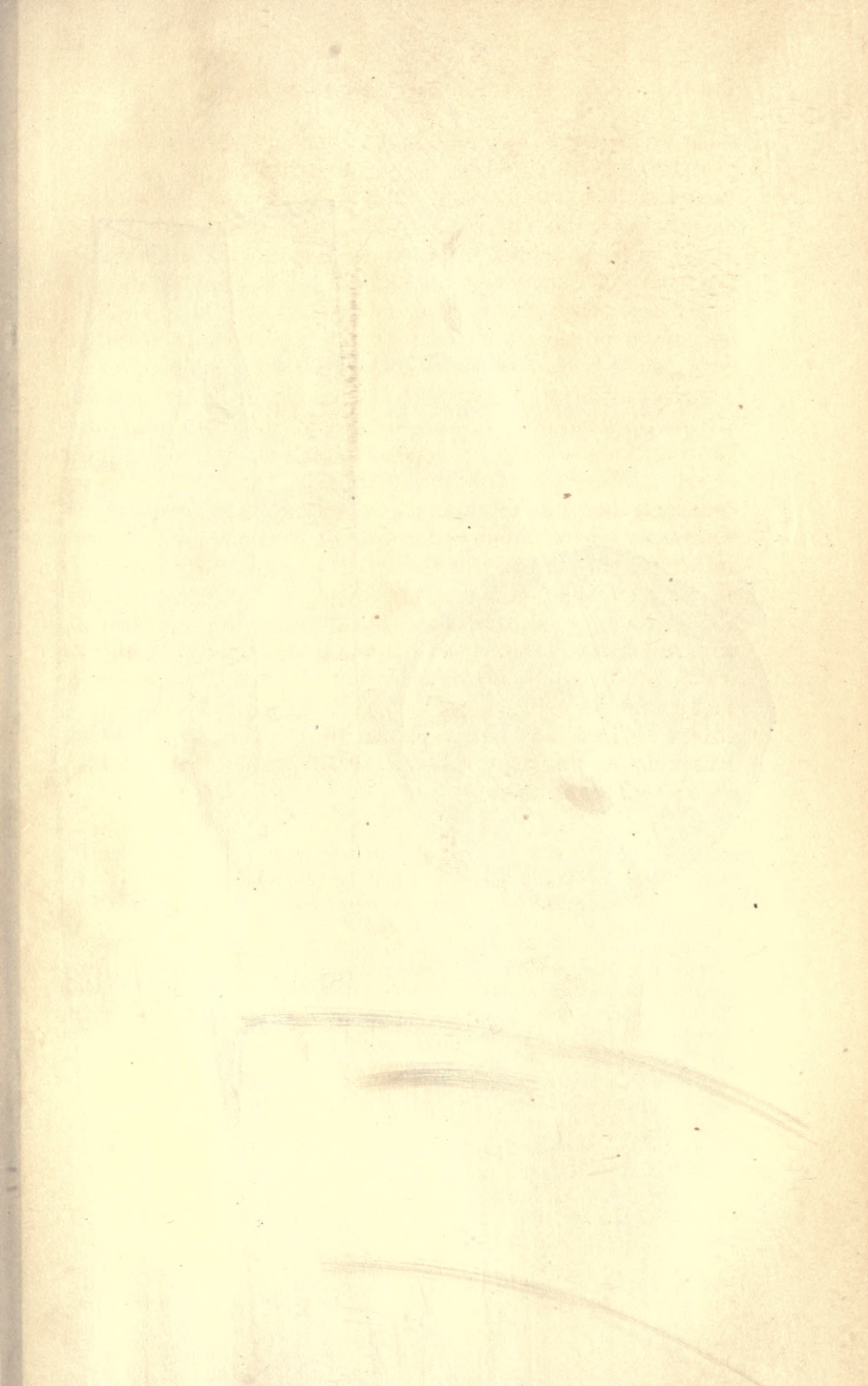
As the thumbscrews and instruments of punishment of the Spanish Armada are still preserved in the Tower, and still kindle the fire of patriotic resistance in the breasts of untutored visitors, so are preserved here 750 halters, each from the saddle-bow of a different Burgundian knight, and each destined, if popular tradition may be trusted, to hang a prisoner.

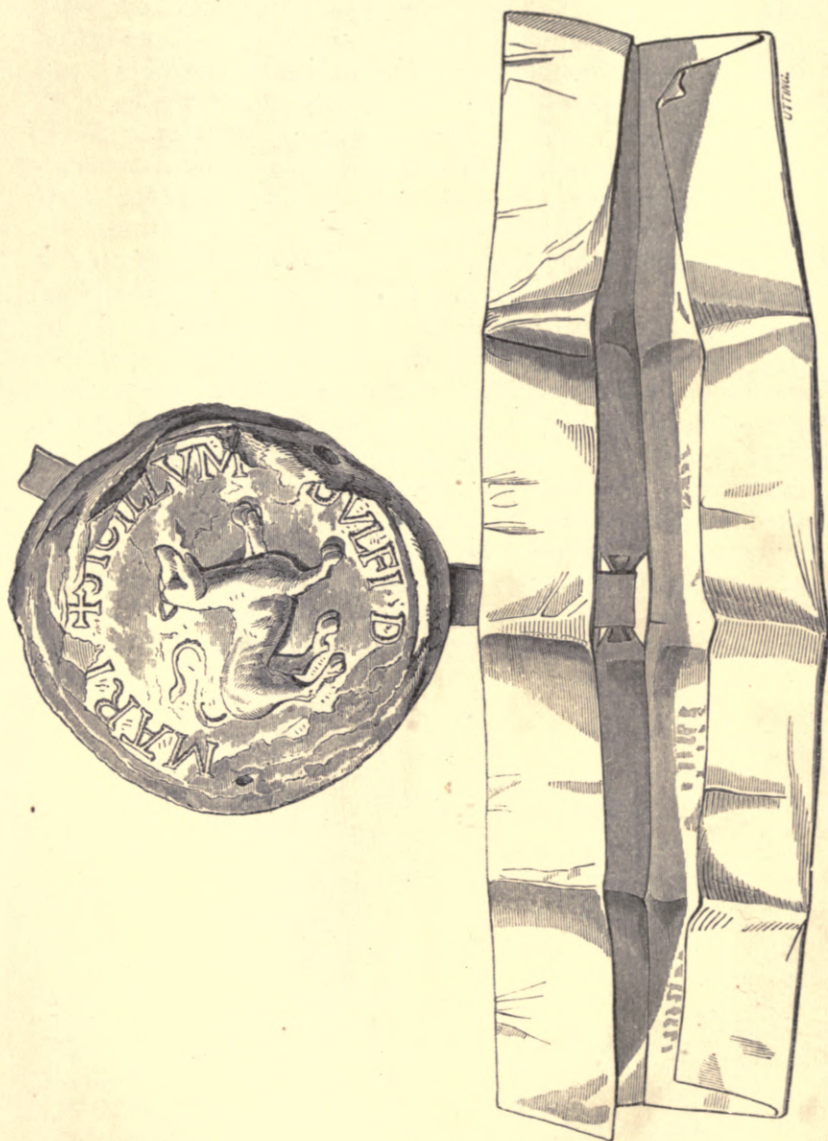
It was from this collection that, thanks to the courtesy and friendly interest of H. B. M. Envoy and Minister, Admiral the Hon. E. J. Harris, and through the mediation of Mr. Albert Way, we received the four morgensterns which were exhibited to the Institute in November, 1867, and are now in the Museum of Artillery. There are still eighty of them at Berne. This very favourite weapon of the Swiss is to be found in all the collections, and in a great variety of forms; but it is seldom met with in English collections. Our examples consist of a strong oak staff, 7 ft. long, with an enlargement at the head, where it is set round with square spikes and armed with a long point. (Fig. 6.)

Weapons of this character must have been of little use against an active opponent, and especially weak in defence. Their value was to deliver a crushing blow from a position of superiority, as in the defence of a breach, and upon assailants so encumbered with their own armour as to be disabled from deriving advantage from the difficulty the wielders must have experienced in recovering them. Considered from this point of view, they have, like all long-handled striking weapons, an interest of their own. They recall to us an age of personal combat and personal equipment, to which no-

thing analogous exists, and in consequence they are nearly the only weapons which have no living analogues. The lance and the sword hold their ground; the halbert, the morgenstern, the bill, in all their grisly varieties, have disappeared from civilised, and almost from uncivilised warfare. It is only in China that we still find travesties of them—borne apparently for parade, not for use. The mace and battle-axe linger among the wilder horsemen of Western Asia, but it is easy to see that their days are numbered.

I am unwilling to close this brief note without expressing a hope that the liberality of the Municipality of Berne may find imitators. Nothing would so much extend the interest of all collections of arms, especially those of different countries, as a free interchange of redundant specimens; for what is very rare in one country is often common in another; and it is a mistake to rest the credit of any public collection on its accumulation of certain objects. It may, indeed, almost be affirmed, that a public collection has no business with duplicates; they are not wanted, and represent objects which are wanted, and might be obtained by exchange. These are principles not likely to commend themselves to ardent collectors; but perhaps those who look on all Museums as primarily subservient to public education will see some force in them.





Original Documents.

CHARTER OF CONFIRMATION BY RALPH DE MORTIMER OF A GRANT TO THE MONKS OF THE PRIORY OF WORCESTER.

Communicated by SIR EDMUND A. HARLEY LECHMERE, Bart.

IN the contributions to the history of Medieval Seals, that have been given from time to time in this Journal, attention has been directed to certain peculiarities in the practice of sealing, observable in our own country and on the Continent, and especially to various usages in regard to the attachment of the seal to the document. In these diversities it may probably be of no avail to seek any established rule of local usage: the object sought in each case would obviously be to ensure the conservation of the seal, and to obviate any risk of its becoming detached from the instrument. The precaution adopted in the present instance has seemed to claim special notice, no similar example of sealing having, so far as we are aware, been hitherto described.

The document under consideration was brought before the Institute at the Worcester Meeting, through the kindness of Sir Edmund Lechmere, Bart., by whose influential exertions and generous encouragement the success of that gathering was mainly promoted. Amongst many favours conferred by him on the Society on that occasion, the friendly liberality with which he threw open, for the enrichment of the local Museum, his ancestral muniments, and also the stores of Antiquity and Art in his possession, will be gratefully remembered. In the collection of documentary evidences that have descended to Sir Edmund, as we believe, amongst his evidences connected with Hanley Castle, the grant to the Monks of Worcester, now for the first time published, was viewed with much interest.¹ That venerable relic with the massive seal of Ralph de Mortimer had, on a previous occasion, been brought under the notice of the Society of Antiquaries by Mr. Evelyn P. Shirley, but its connection with the Benedictine Priory of Worcester had not, so far as we are aware, been ascertained. The following particulars are given in the *Archæologia*.

“Mr. E. P. Shirley exhibited a Charter of the twelfth century, from the muniments of the Lechmere family. It is a confirmation from Ralph de Mortuo Mari of a grant of land in Wribbenhall, co. Worc^r, made by Turstinus to the Monks of a monastery not specified. The peculiarities of this charter consist, first, in its being signed with a cross by each of

¹ Catalogue of the Museum formed at Worcester during the Meeting of the Archæological Institute, 1862; p. 49.

the persons who made and confirmed the grant, a practice of very rare occurrence; and, secondly, in the seal being suspended by a thin label, not, as usual, from the foot of the charter, but from the middle of it. It is believed that this is the only instance hitherto known of such a singular mode of attaching the seal being practised in England, although something similar exists in the collection of charters in the Hotel de Soubise, at Paris."²

Through the friendly assistance of Sir Thomas Winnington, to whose knowledge of the history and antiquities of his county we have been frequently indebted, the situation of the lands to which the subjoined document relates has been satisfactorily identified, and we have been enabled to ascertain that the grant, "*ad victum monachorum*," was made to the monks of Worcester. "*Wribbenhall*," as Sir Thomas informs us, "*is a township in the parish of Kidderminster, situate opposite to Bewdley, on the Severn, and really forming part of the latter town.*" Nash does not give any account of it. The name *Beuleou*, found in an endorsement on the document in possession of Sir Edmund Lechmere, is not unlike Bewdley; that place, however, according to the statement of Leland, did not exist before *t.* Henry VII.; the name has always been supposed to have been a corruption of *Beau lieu*. Bewdley is in the parish of Ribbesford, the Norman church of which still exists, situate a mile lower on the river. The church of Worcester holds property at the present time in Kidderminster parish, adjacent to Wribbenhall, namely, Eymone; and Ribbesford once belonged to the Priory.

In the Register of the Priory of St. Mary's, Worcester, the valuable record of the revenue of that monastery towards the close of the thirteenth century, for which we are indebted to the Ven. Archdeacon of London, under whose editorial care it has been published by the Camden Society, the following entry is found regarding the grant of Wribbenhall.³

"De Wrubenhale.—Quidam homo Thurstinus nomine dedit nobis Wrubenthal: Radulphus⁴ de Mortuo-Mari seniore concedente et confirmante, sicut carta ipsius testatur; succedente tempore Rogerus de Mortuo-Mari cepit eam ad feodo firmam. Unde Priori et conventui fidelitatem juravit, et relevium dedit, et obligavit heredes suos sicut carta ipsius testatur ad faciendum Priori et conventui fidelitatem, et ad dandum relevium pro tempore, et ad solvendum singulis annis, in festo S. Martini, xx. sol."

It is scarcely necessary to remind the reader, that Ralph de Mortimer, here designated *senior*, was probably the great Norman noble who came over with the Conqueror, and obtained a grant of Wigmore, with extensive possessions in Herefordshire and adjacent parts of the Welsh Marches. The connection of that powerful family with Shropshire has been set forth by Mr. Eyton in his History of that county, vol. iv. p. 196.

There is reason to believe that Ralph de Mortimer had a son of the same name, grandfather of Hugh de Mortimer, the spirited opponent of

² *Archæologia*, vol. xxxi. p. 475. This communication was made April 18, 1844.

³ *Registrum sive liber irrotularius et consuetudinarius Prioratus B. M. Wigorn.*, with an Introduction and Notes by W. Hale Hale, M.A., Archdeacon of London.

Camden Society. The entry occurs at f. 20 b. in the rental of the Priory, A.D. 1240. In the rental of 1253 the following is found,—"*Molendinum. Wurbenhal*." In festo S. Martini xx. sol." *Ibid.* f. 150 b.

⁴ *Sic* in the printed text.

Henry II. on the death of Stephen. From similarity of name it is probable that the two Ralphs may have usually been taken for one and the same person. May not the distinctive description *senior* have referred to such a son then living and well known? It may deserve notice that the first Ralph appears in the pedigree given by Mr. Eyton, vol. iv. p. 196, as having had only one wife, but the document under consideration mentions wives—"uxorum mearum;" and whilst it states that the grant was with the assent of his sons, no allusion is made to any daughter, whilst in the pedigree we find Hawise married to the Earl of Albemarle. The document that we have been enabled by the kindness of Sir Edmund Lechmere to place before our readers may probably be ascribed to the early part of the twelfth or to the close of the eleventh century, and be a grant by the companion of the Conqueror very late in his life. In any case it is an early example of sealing by a subject.

Amongst sub-tenants of Ralph de Mortimer the name of Turstinus repeatedly occurs; Mr. Eyton has stated his opinion, that he may have been identical with the person called Turstin de Wigmore in certain passages of the Domesday record; it is plain that he was a person of great connections and wealth at the period, and it has been supposed by genealogists that he was ancestor of the great Herefordshire family of Lingen.⁵ According to some authorities he has moreover been identified with Turstin Flandrensis, elsewhere called Turstin Fitz Rollo, or Turstin Fitz Rou le Blanc, who bore the gonfanon of the Conqueror on the battle-field of Hastings. We must, however, refer the reader who may care to investigate these intricate points of history to the volumes so carefully elaborated by our friend, above cited.

Amongst the witnesses of the subjoined grant to the monks of Worcester, we find—"Bern' Oxpac,"—probably the person whose name occurs in certain evidences cited by Mr. Eyton, in his account of Brompton Brian; Bernard, son of Oxpac, written also Unspac, appears in connection with that portion of Shropshire History.⁶ Bernard Fitz Unspac occurs *inter* 1074—1135, and succeeded to Kinlet, with other estates in Shropshire, Herefordshire, and elsewhere; Brien his son was Lord of Kinlet *circa* 1157-8. Mr. Eyton has remarked that we have in the mention of his name as "Brienus Unspac," in a Precept of Henry II., that may be ascribed to that date, an early instance of the name of an ancestor being adopted as the surname of a family without the usual word *filius* or *fitz*. Hist. Salop, vol. iv. p. 242. In the name, however, of the witness to the subjoined instrument, "Bern' Oxpac," we have a still earlier example of such an usage.⁷

A. W.

Ego Radulfus de Mortuo Mari concedo terram de Wrubenhalla, que est in estimatione unius virge, liberam ab omni servitio seculari, excepto geldo si contigerit, ad victum et dominium monachorum, sicuti Turtinus [*sic*] eam donat cum filio suo Girardo. Hoc, quia de me

⁵ Eyton, Hist. Shropshire, vol. v. p. 74; vol. xi. p. 333.

⁶ Ibid. vol. iv. pp. 241, 244.

⁷ See Mr. Eyton's Pedigree of Brompton of Kinlet, Hist. Shropshire, vol. iv. p. 244.

The seal of John de Bronton, who died *circa* 1221, noticed *ibid.* p. 247, bears the legend—*Sigillum Johannis Uspac de Bronton*, showing that the real name of the family had not been lost.

feodio^s est, concedo pro anima mea, et uxorum meorum, et dominorum et filiorum et parentum meorum. Hoc mea [L. s.] propria manu confirmo ✠ assensu filiorum et hominum meorum, ut sit firmum et stabile in perpetuum. Ego vero Tustinus [*sic*] licencia domini mei confirmo mea ✠ manu. Testes sunt Bern' Oxpac, Gislebertus, Johannes, filii Ebrardi, Ebrardus de Dontona, Rogerus, Walterus, Radulfus, Balduinus, Rogerus.

Endorsed, in a hand that may be nearly contemporary :—Radulfus de Mortmari de uurebehala ;—and also, in a much later hand : De terra de Wrubenhalle juxta locum qui dicitur Beuleou.

The seal, of circular form, is an unshapely mass of white wax ; the device is a lion passant ; the following letters of the legend may be decyphered—SIGILLVM . . DVLEFI D . . . MARI. The dimensions of the parchment are 6 in. by 3 $\frac{1}{4}$ in.

^s *Sic* in the original charter.

Proceedings at Meetings of the Royal Archaeological Institute.

February 7, 1868.

Brigadier-General LEFROY, R.A., in the Chair.

A REPORT by Captain Luard, R.E., describing the examination of one of the postern passages of Windsor Castle, was read.

At their annual meeting in 1866, the members of the Archaeological Institute were shown the many objects of interest at Windsor Castle ; among others, they were taken down a postern leading from a shaft in the floor of one of the basement rooms between the York and Devil Towers, in the upper ward of the Castle, and terminating about 15 ft. outside the walls of the South Terrace, and about 31 ft. below the ground at that spot.

On that occasion, a shaft to enable them to ascend was sunk about 6 ft. from the lower end of the postern ; this lower end was at the time closed with rubbish, and great desire was evinced to know where and how much further the postern went ; a wish which might possibly have been augmented by certain rumours long extant of a passage from the Castle which led, some said to Datchet, some to Burnham, and others even affirmed that it led to Maidenhead.

The matter having been submitted to her Majesty, who graciously expressed her approval of the end of this postern being explored, a detachment of the Royal Engineers was sent from Chatham to Windsor for the purpose.

The description of the postern was as follows :—it averaged 7 ft. in height, and 5 ft. in width ; the floor at the upper end was 21 ft. below the level of the pavement of the inner court immediately opposite, and had a fall of 23 ft. to the exterior of the Castle, in a length of about 94 ft. ; or as nearly as possible, a slope of 1 in 3.

With the exception of the upper part (which possessed a skin of masonry), the postern was simply a roughly hewn passage through the chalk ; the upper end it is not necessary here to describe in detail, as it is believed that this has been done already, but it has been very accurately measured and laid down both in plan and section. It is stated to be *temp.* Henry II., and is a good specimen of close jointed masonry, the greater part being composed of squared chalk, which in that position has answered well as a substitute for harder, but more expensive material.

It is well known that in ancient times a ditch ran round this side of the Castle, but little was known of its dimensions. This ditch was filled

up in the reign of Charles II. at the time of the construction of the South Terrace, and it was presumed that the postern very probably communicated with this ditch. On examining the mass of *débris* which blocked up the end of the postern, it was observed that it lay in almost horizontal layers, and it was therefore very evident either that this was the point, or nearly so, where the postern entered the old ditch ; or else, that some extensive cutting, for drains possibly, had been made, and afterwards filled in from above.

In order to penetrate safely through this *débris*, it was necessary to have regular mining cases constructed. On the second day after the mining operations had begun, traces of masonry were discovered ; and on the third, a stone doorway was completely exposed to view, and it was ascertained that from the exterior of this doorway wing walls branched out obliquely. The walls of the doorway were built of rubble masonry, with dressed face, but unsquared joints, partially of chalk blocks, partially of Oxford stone, or a stone very much resembling it ; the jambs, which were only 2 ft. 10 in. apart, were built of alternating blocks (well squared and dressed on the face, with double chamfered edges) of a very faint red sandstone, and of hard chalk, the latter so altered in appearance, and with so remarkably hard a surface as to be scarcely recognisable. Of the walls, only about 3 ft. in height still stood, and of the door piers only about 5 ft. 6 in. in height remained, (though they were probably not much higher originally,) but the arch of the doorway was gone, and no remains of it were discovered in the *débris*, either then or subsequently ; on a staple which was firmly fixed in one of the door jambs, the lower hinge of the old door still hung, and a few of the stud bolts of the door were discovered, showing that it was about 3 in. in thickness.

The gallery was then pushed sufficiently far forward to enable branches to be made on either side to ascertain the extent of the oblique wing walls ; it was ascertained that they terminated at distances of 4 ft. 6 in. and 6 ft. 6 in. respectively from the doorway, and it was found that a line joining the extremities of these wing walls was parallel to the direction of the Castle walls along the south front ; this alone was good evidence of the doorway having been the entrance of the postern into the Castle ditch ; the bodies of these walls could not be examined, but it is surmised that they are built of squared chalk ; they were faced with dressed flints set in mortar in courses, with occasionally horizontal tile joints, and faced also in patches with stone or hard chalk.

It having been suggested that there might be a corresponding opening in the counterscarp on the opposite side of the ditch, a small gallery 5 ft. 6 in. high and 3 ft. 6 in. wide, was pushed forward to a distance of 28 ft. from the face of the doorway ; an excellent section of the bottom of the ditch was thereby obtained, but when the counterscarp was reached, there was no doorway, and as it was not considered necessary or advisable to make any further exploration in the ditch itself, the work terminated, and the party of Royal Engineers returned to Chatham.

From the character of the masonry of the doorways and arches in the upper part, the time of Henry II. has been assigned to it, and very possibly it may be of that date ; but this is certainly not decisive evidence of the actual date of the postern. There can be but very little doubt that William the Conqueror, or whoever else first constructed a

work of defence on Windsor Hill, made posterns or galleries from the interior down to the main ditch. I may here remark that there are in addition to the postern here referred to, two others (or more) in different parts of the Castle, both communicating with the old ditch. The solidity of the chalk which forms the subsoil of the Castle Hill enabled galleries to be pierced through it without being lined with stone or other material, and it is very probable that when the additions to the south side of the upper ward of the Castle were being made in the reign of Henry II., this postern had archways formed in it at certain intervals, simply to carry the walls above; the front wall had apparently so great a thickness of chalk between its foundation and the roof of the postern that an archway was at that point unnecessary. One of the doorways is evidently of a more recent date than the other; it was probably a barrier to prevent access to the Castle, at the time the ditch was still in existence.

Certain rather peculiar hieroglyphics and writings were discovered, scratched or cut on the chalk sides of the postern: they were situated between the brick barrier wall and the lower end of the postern; they were all discovered before any of the workmen descended, and so far as could be judged from their appearance were genuine. One of these writings has been read to be the name "Wright," possibly that of a workman employed in building the doorway at the entrance to the ditch, or of one of the guard of the portal; and this is the more probable from the proximity of a rough sketch or scratching of a helm with plumes and a coat-of-arms beneath.

With respect to the doorway at the lower end of the postern, *i.e.*, where it entered the ditch, it has been considered to be of the same date as the archways at the upper end. Still this doorway does not seem to be of quite the same character as the others, and, in fact, has a remarkably Roman appearance; the jambs of the portal bearing very considerable resemblance to those of one at Bremenium (Rochester in Redesdale), of a similar character. On the other hand, the fact of the jambs being constructed in alternate courses of red and white stone is (from its coincidence with the description of masonry of that date, given in Viollet le Duc's History of the Military Architecture of the Middle Ages), perhaps a further clue to its being temp. Henry II.

The CHAIRMAN drew attention to a remarkable jade celt exhibited by him. It was a ceraunite, or thunder-stone, with Gnostic inscriptions of the third century in Greek, and also on a foliated device.

Mr. EVANS remarked upon the extreme rarity and interest of the specimen exhibited, as proving the superstitious value attaching to these instruments even in Roman times, and as illustrating the passage of Sotacus, quoted by Pliny. He also instanced a passage in Claudian,—

*"Pyrenæisque sub antris
Ignea fluminæ legere ceraunia Nymphæ,"—*

as at all events suggestive that the cave deposits, containing stone implements, had attracted observation in early times.

Marbodeus, who died about A.D. 1123, thus describes the formation and some of the effects of the ceraunites:¹—

¹ See the translation of the Lapidarium of Marbodeus in King's Antique Gems, p. 406.

"Ventorum rabie cum turbidus æstuat æther,
 Cum tonat horrendum, cum fulgurat igneus æther,
 Nubibus elisus cœlo cadit ille lapillus—
 Qui caste gerit hunc a fulmine non ferietur,
 Nec domus aut villæ quibus affererit lapis ille."

Gesner, Aldrovandus, and others, figure many of these *ceramixæ*, and include among them not only the stone hatchets similar to that exhibited, but also perforated axes. Kentmann relates how, about the year 1560, one was found under the roots of a large oak which had been struck by lightning. This was a perforated specimen. In Germany, as indeed in Ireland, Scotland, and most western countries, stone hatchets and axes are still treasured as preservatives against thunder, and of good effect against diseases in cattle.² Preusker relates that in Germany, on account of their valuable properties, they are sometimes preserved in families for hundreds of years; and, in illustration of this, Mr. Evans exhibited a long greenstone celt with the date 1571 engraved upon it in characters of the period. This specimen came from the north of Germany, and the date upon it appears to give the year when it was discovered. If so, it must have been carefully preserved ever since, as the edge is still uninjured.

The Very Rev. Dr. ROCK and Mr. J. W. BERNHARD SMITH made remarks upon the inscription.

A memoir on this very remarkable object is given in the present volume of the Journal, p. 105.

Mr. EVANS made some observations upon the fine collection of weapons and implements of flint with which the tables were covered, and which had been collected on the Wolds of Yorkshire within the last thirty-five years by Mr. E. Tindall, of Bridlington. Their great number was most remarkable; the collection was, in fact, the most extensive and varied which had been formed in the country by any one person. It comprised almost every known variety of such objects, such as saws, knives, hatchets, axes, chisels, scrapers, lance-heads, arrow-heads, and numerous tools of which it is impossible to specify the exact use. He commenced by remarking that the flint of which these various weapons and implements are made, is in many parts of the Yorkshire Wolds not the flint occurring on the spot, but that it must have been brought from some little distance. He next described briefly the manner in which the simplest form of flint instruments was produced, by flaking off successive triangular or sub-triangular prisms from a polygonal block core or matrix, in the same manner as is practised by the flint-knappers of the present day in the manufacture of gun flints. The cores from which flakes have been struck are of common occurrence in Yorkshire, as are also the flakes. These latter, like the obsidian flakes of the Mexicans, required no further preparation to be ready for use as knives, or as scraping tools. On many could be traced distinct marks of use, where the sharp edge had been worn away, apparently by scraping bone or some hard substance. In some flakes the edges have been notched so as to produce saws, and in others they have been carefully worked so as to adapt them apparently for lance-heads; for the larger leaf-shaped weapons, this seemed the obvious purpose. Smaller flakes had been subjected to a greater or less amount of side and surface chipping, and had been converted into arrow-

* *Blicke in die vaterländische Vorzeit*. Vol. i. p. 170.

heads. Of these there were three principal forms, the leaf-shaped, the lozenge-shaped, and the barbed (both with and without a central tang) besides various minor varieties. Some of the arrow-heads, and more especially two or three of a long triangular form, with slight barbs and no central tang, had been made with extraordinary skill and delicacy of execution, one small flake after another having been removed at regular intervals, and in precisely the same direction, so as to produce a series of minute parallel ridges and hollows, like ripplemarks, on the face of the arrow-head. A very common form is the scraper, or as it is usually called in Yorkshire, the "thumb-flint," which much resembles, or is even identical in form with the stone implement used until lately by the Esquimaux in scraping and preparing leather. Though some of the so-called "scrapers" were probably used for such a purpose, it is almost certain that others must have been prepared with another object, though what that may have been cannot at present be satisfactorily determined.

Some of the long flakes, and other more carefully shaped implements, show considerable abrasion and wear at the ends. It appears possible that these rounded ends may have been used to press off the minute flakes in the secondary working of the flint for arrow-heads, &c., though the Esquimaux employ for that purpose the rounded end of a hard piece of bone. Among the more finished flint implements was pointed out a flat rectangular piece, in character much resembling that from Denbighshire, engraved in this Journal, vol. xi. p. 414. It is not, however, ground upon the faces, but only at the edges, which have been considerably injured. A fragment, polished on both faces, seemed to belong to the same class of instruments. Other very remarkable specimens were some fragments of carefully chipped curved knives, analogous in form to that engraved in the Proceedings of the Society of Antiquaries, 2nd Ser. vol. iii. p. 210, but in this instance not polished on the face. The principal other articles in flint were hatchets or celts, roughly chipped, polished at the edge only, or polished all over, a chisel of flint, and several of the spherical hammer stones or mealing stones. Beside these there were some hammer stones of quartzite, some having depressions on either side to assist the hand in holding them, a hammer of a similar character made from a portion of a hone-stone celt, and an oval perforated hammer formed of a basaltic rock. There was also a fine perforated adze of porphyry, and a long lozenge-shaped perforated axe of greenstone. The remainder of the collection consisted for the most part of hatchets or celts of different varieties of greenstone, which did not call for any particular remark, though many were fine of their kind, and presented peculiarities which in a more detailed account would be worthy of notice.³

Sir JOHN LUBBOCK thought the distinguishing feature of the Yorkshire implements was their small size, compared to those of Denmark and France, where the flints were so much larger. In early times people settled as savages do now, upon the spot which appeared to have some peculiar advantages for them, and they had their reasons, too, for using other stones than those of the district. Where the stone of the district was not used, it was not difficult to find such implements; but in

³ Since these remarks were made, specimens exhibited have been transferred to Mr. Evans' collection.

Kent, where flint abounded, it was the reverse. The objects shown were very similar to those found in the tumuli of the Wolds, and they were not of the very earliest period of such productions of man. The manufacture was exceedingly difficult. In reply to the Chairman, Sir JOHN stated that no savages of the present day manufactured implements of stone that could be compared to the very oldest known examples.

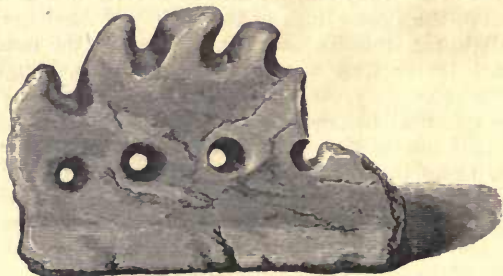
Mr. TINDALL replied to questions as to the formation of his collection, and showed his "log-book," or record of the "finds," as they occurred.

Mr. HUGHES commented upon the nature of the material as compared with the chalk flints.

Mr. HEWITT made some remarks upon the nature of the country in which the collection was made.

Col. LANE FOX spoke of the differences between the implements of Yorkshire and those found by him in the ancient forts in Sussex, and in Ireland. By way of comparison, he exhibited some lately found at Cissbury, Sussex. See his memoir, *Journ. Roy. U. S. Inst.* vol. xii. p. 412. A series of these remarkable objects has been presented by him to the Christy collection. In Ireland he had found all the four types of arrow-heads exhibited by Mr. Tindall. No arrow or spear-heads were found in Sussex.

Mr. TREGELLAS gave an account of some relics which had been recently discovered at the George Gravel-pits, Kingston Hill, Surrey, to the exhibition of which H.R.H. the Duke of Cambridge had graciously assented. The pottery and other objects of clay are here figured, and consist of—

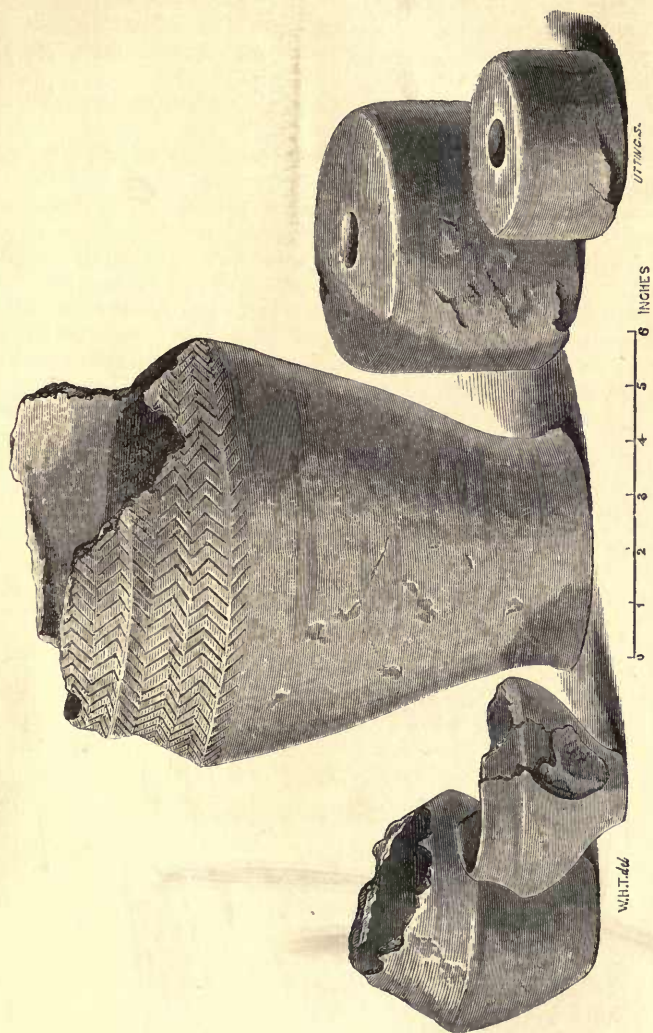


Fragment of baked clay found on Kingston Hill. Length about $7\frac{1}{2}$ inches.

1. A large sepulchral urn of coarse material, hand made, of unusually graceful outline, and differing from most objects of a similar character in its base-moulding or expanding foot. The zigzag ornament was made with a blunt, chisel-shaped tool. This vessel measures nearly 10 in. in height, diameter 8 in.

2. Two small vessels, of a finer material, and more carefully manufactured, probably on the wheel.

3. Two cheese-shaped perforated objects of rough clay, imperfectly baked; one of them exhibits marked evidence of a rope or thong having been passed through it. Such objects have been called "sling-shot." A similar perforated cylinder of terra-cotta was in the possession of the late Dr. Roots of Kingston. It was stated to have been found at



Urns and cylinders of baked clay found on Kingston Hill, Surrey. On the estates of H. R. H. the Duke of Cambridge.





Scrapers, or "thumb-flints," and implements of flint found in the parish of Bradford Abbas, Dorset. Original size.

In the Collection of Professor James Buckman, F.G.S., F.L.S., &c.

Cæsar's Camp, Wimbledon Common, adjacent to a spot where spear-heads, funereal urns, and other pottery, supposed to be Roman, had been brought to light. This object measured in diameter $5\frac{1}{4}$ in., height nearly 3 in.

4. A cock's-comb-shaped fragment, with a flat base, of similar material and manufacture to the two last named ; and

5. Some pieces of a circular cake of copper ; the diameter of the entire cake may have been about 9 in.

Mr. Tregellas observed that these relics formed a continuation of a series to which he had drawn attention at a meeting of the Institute on 3rd July, 1863, and which are enumerated in vol. xx. p. 372 of this Journal. The discovery of cake copper at the site where, as is well known, numerous implements of bronze had been previously discovered by the late Dr. Roots⁴ of Kingston, and others, was adverted to as a matter of considerable interest. Mr. Tregellas stated that the metal had been submitted by him to Dr. Percy, at the Museum of Economic Geology, and that it had been found to be pure copper, probably obtained from the grey carbonate. The use of the fourth object in the above list, of which a representation is also annexed, appeared very doubtful ; and no satisfactory suggestion of it was offered to the meeting.

All of these relics were said to be discovered in "pot-holes," about 3 or 4 feet below the surface, the holes appearing to follow some sort of order in their arrangement. It was anticipated that further discoveries would be made ; which, thanks to the interest taken in the excavations by Messrs. Clutton (the Duke of Cambridge's agents for the Coombe estate), and to the watchfulness of their local representative, will, in such case, probably be also brought under the notice of the Institute. Mr. Tregellas concluded by expressing a hope that the disinterment of objects of so varied and interesting a character, in the vicinity of the metropolis, would receive the attention which they seemed to merit ; and that some further light might thereby be thrown upon the circumstances connected with the establishment of the large and important settlement which must apparently have existed, even prior to the Roman invasion, on Kingston Hill.

Mr. FRANKS and Mr. HUGHES made several remarks upon these objects, especially in reference to discoveries in similar kinds of "pot-holes" in Kent.

Professor BUCKMAN, F.G.S., sent the following notices with drawings, illustrative of various types of flint implements found in Dorset. Amongst these were several well-formed "scrapers," also a considerable number of roughly fashioned implements, possibly for the like uses, uniformly fashioned with a nick on the *left* side (as viewed with the flat or conchoidal surface undermost), possibly intended for attachment by some kind of cord to a handle or shaft. (See woodcuts.) Similar objects, notched in like manner on the left edge, have occurred in Yorkshire and other parts of England :—

"Various articles in wrought flint are so common in Dorsetshire, and especially on my own farm, as to make me think that an examination of

⁴ Some examples of pottery from this site were exhibited by Dr. Roots at the Winchester Meeting in 1845. See the

Winchester Volume; Museum Catalogue, p. xli; Proceedings Soc. Antiq., vol. i. p. 67.

some specimens would be acceptable to the Members of the Institute. My farm is situate in the Parish of Bradford Abbas, midway between Yeovil, in Somerset, and Sherborne, in Dorset; consequently just within the confines of the latter county, being separated from the former by the river Yeo. We are on an elevation over-looking the Blackmore Vale, with the range of hills between us and Weymouth for a back-ground. These hills are of chalk, the flints from which have drifted into the valley; but my farm is free from drifts of any kind. The subsoil is composed of different members of the inferior oolite, and an unwrought or unchipped nodule of flint is of very rare occurrence; not so, however, cores from which flakes seem to have been struck off, knives, arrow-heads, and other objects bearing evident marks of having been worked. These specimens are very difficult to classify; but in the examples I have selected, I have attempted the following rude arrangement for my own convenience.



Leaf-shaped arrow-head.
Original size.

"1. Arrow-heads. Though some of these are so delicately wrought as to leave no doubt as to their use, in other instances it would be more difficult to determine the purpose intended. In only one example have I noticed any approach to the formation of barbs, and I am led to think that the specimens are of a somewhat early period, as the much-barbed arrow is a refinement of cruelty, which seems to point to an advance in ingenuity, if not also in civilization. Most of them were, perhaps, arrow-tips for bird-bolts, or to knock over small animals, which would not require to be transfixed in order to secure them.

"2. The flint-flakes, though variable in form, yet show unmistakable signs of having been worked. Some of them were probably employed as rude knives, and perhaps all for some common domestic purpose, of which one can only form an adequate notion, by the fact that these rude implements were made at a time when iron manufacture had not commenced.

"3. The scrapers are very numerous; though varying in size, they seem to be made on an uniform plan, namely, flat on one side and rounded at one end, sometimes in a very elaborate manner. (See woodcuts.) It has been suggested that their use was to scrape and prepare skins, for which purpose they seem well adapted.

"4. Implements. There is such an uniform plan about some of these as to induce me to think that they were designed to be affixed in sticks, probably for use as hammers for more delicate work. A few characteristic examples are here figured.

"5. Celts. The two portions I have sent so evidently show the outline and polish of a portion of a celt, as to incline me to the belief that they were broken implements of that class from which flakes had been struck off, and the remaining portions thrown aside, like the cores or nuclei that frequently occur. They are interesting, however, as showing that they belong to a period when such weapons or implements were made, and it would appear as beautifully polished as are some of the examples of celts from Wiltshire.

"6. Flint cores. Whether these are only the waste portions or re-

mains of pieces of flint from which flakes, knives, &c., had been struck off, it would be difficult to determine. They may, indeed, have been employed as hammers after the process of chipping, and if so, their various forms would point to many and different uses.

"7. Worked flints of various kinds are so abundant that only a few examples may claim notice. I pick up, however, every fragment of flint that arrests my attention, in the hope of being enabled to elicit some suggestion to enable me to obtain clearer notions with regard to the use and origin of these curious objects. I take it for granted that no one who attentively examines the specimens laid before the Institute, can conclude that they were brought into their forms by accident. Nor can it be conceived that their forms are due to modern work. Flint Jack has been heard of here; but the rougher forms now sent he would not make, and the more elaborate ones he could not, and if he or anyone else did so, they would not be left about the fields to be picked up after every fresh work of cultivation. It is, however, right to observe that my bailiff states that he has often gone to these fields to pick up a bit of flint that would serve for his gun; this only shows that fashioned flints were there before, and it is just possible that some of the specimens which have evidently been broken were so done for this purpose. That worked flints are abundant over this island, I am now certain from lengthened observation. I have obtained them from the Cotswolds, in opening British barrows; but nowhere have I seen them in such abundance as on my farm in Dorset, and probably for the want of a daily search. That these are more general than was supposed, I gather from the fact that, wherever I have been, careful search has enabled me to find them. At Portland I saw indications of flint implements; on the Nothe at Weymouth I found some flint flakes; at Lyme Regis I thought that I had found the site of a manufactory of these singular articles. Still, extended search is requisite; for without having all the evidence before us, it will be difficult to arrive at correct conclusions, and I have been desirous to bring my specimens before the Institute, in the hope that the Members may point out any new facts or suggestions that tend to throw light on these very curious vestiges of the earlier occupants of Britain."

Antiquities and Works of Art Exhibited.

By H.R.H. the DUKE OF CAMBRIDGE, K.G.—Urns, cylindrical objects of baked clay, possibly intended for use as "sling-shots," and fragments of early pottery, found at Kingston, Surrey.

By Mr. E. TINDALL.—A large collection of flint weapons and implements, found on the Wolds of Yorkshire.

By Brigadier-General LEFROY, R.A.—A jade celt, with Gnostic inscriptions.

By Mr. J. EVANS.—A long greenstone celt, with the date 1571 engraved upon it.

By Mr. W. J. B. SMITH.—A fine English two-handed sword of parade, of the time of Henry VIII.,—an English storming helmet of the time of Charles II., with the original movable lining—a mulberry calculus, mounted as a sort of *ex voto*; also an unknown object in cast iron, supposed to be a cannon shot(?).

By Colonel A. LANE FOX.—Flint implements, found in pits in the camp known as Cissbury, near Worthing, Sussex.

By Dr. KENDRICK, of Warrington.—Three miniatures on ivory ; one of them, supposed to portray the old Countess of Desmond, is more probably a copy of the head of Clara Eugenia, Governess of the Netherlands, by Van Dyck, of whom there is a fine portrait at Devonshire House, London. The miniature exhibited resembles her portrait engraved by Vorsterman, in Van Dyck's "Centum Icones." Another of the miniatures appeared to be the head of Thomas, Prince of Savoy, after that by the same master, number 7, in the series ; the third was described as that of Van Dyck himself.

By the Rev. H. T. ELLACOMBE, of Clyst St. George, Devon.—A small collection of deeds and numerous casts of seals relating to Devonshire.

1. 1 Sept. 1360. Grant of the church of Northam, to the Collegiate Church of St. Mary Ottery, by John Grandison, Bishop of Exeter. This document is particularly to be noticed as being subscribed by the bishop,—*Et ego idem J. de G. Exon. manu propria hic subscribo. Amen.* Seal with counterseal in fine condition.

2. 16 Kal. Aug. 1284. Arbitration relating to the church of Payhem-bury, Devon, concerning a dissension that had arisen between the Abbot and convent of Ford Abbey, Devon, and Master Nicolas de Honetone, calling himself rector of that church. The matters in dispute were settled by Peter Quivil, Bishop of Exeter, whose seal, with those of the Chapter and the Abbot of Ford were appended. The seal of the Dean and Chapter of Exeter remains, imperfect. Legend—"Sigillum Decani et Capituli Exoniensis Ecclesie ad Causas." Green wax.

3. Aug. 1299. Award of Thomas Bishop of Exeter, in reference to the dispute between the Church of Taletton and the Abbot and Convent of Ford, concerning the tithes of 13 acres of land of the demesne of said monks in Tale alleged by the said rector to be within the bounds of his rectory.

4. A.D. 1295. Confirmation by Thomas Bishop of Exeter, of the charter of his predecessor Peter to the Abbot of Ford of the appropriation of the church of Payhembury.

5. 26 Dec. 5. Edw. IV. Letter of Attorney by Lady Dynham and others for giving possession to John Meryfeld and wife, of land in Holeweyes, &c.

Also, a small collection of plaster casts of seals appended to documents in the muniment-room of the Corporation of Exeter.

By Mr. J. YATES.—An Abyssinian weapon—a combination of a hook and spike with which an adversary might be dragged towards his opponent, and pierced.

By Mr. W. H. HART, F.S.A.—

1. A Book of Hours of the Blessed Virgin Mary according to the Roman use. A manuscript on vellum, $4\frac{1}{4}$ in. by 3 in., with several miniatures surrounded by elegant borders, in one of which is a device similar to a printer's mark ; probably the mark of the person for whom the MS. was executed. Thirteenth century.

2. A similar book. A manuscript on vellum, $3\frac{1}{2}$ in. by $2\frac{1}{2}$ in., with illuminated capitals ; bound in morocco. The Pope's triple crown with keys is impressed on one cover, and on the other a crown with this lettering, "T est L."—Fifteenth century (?)

3. A Book of Hours of the B. V. Mary, according to the use of the Church of Cologne, with Calendar. A manuscript on vellum, 5 in. by $3\frac{1}{2}$ in., with numerous borders ; of a date subsequent to Pope Sixtus the

Fourth, who flourished A.D. 1472-1484. (Now in the Library of the British Museum.)

4. "Heures de la Vierge Marie. Ensemble quelques devotes Oraisons et Litanies." A manuscript on vellum, 5 in. by 3½ in., with illuminated capitals, ornamented with six wood engravings worked on vellum and illuminated in the style of miniatures; it is bound in red morocco covered with scroll tooling, filled with other ornamentation. Outside the first cover, in the centre, are two letters M interlaced between four letters S, and outside the last cover, two letters C interlaced. Sixteenth century.

By Messrs. WILKINSON.—A state sword of the Isle of Man; of the fourteenth century. A minute notice of two swords of state belonging to the Isle of Man may be found, *Proceedings Soc. Ant.*, second series, vol. iv. p. 123. One of them, of considerable antiquity, bears on the pomel the arms of Man, as borne in the thirteenth century. The other, at present in use, has a blade with the name of "Andrea Ferrara" (*sic*); the hilt and mountings date from about 1750.

By Messrs. LAMBERT.—Fourteen tazze, cups, paxes, and statuettes, of silver or silver gilt.

Friday, March 6, 1868.

MR. O. MORGAN, M.P. and V.P., in the chair.

An account of the "Recent discoveries on the site of the Old White Hart Hotel, Bath," by the Rev. H. M. SCARTH, M.A., was read.

"As the members of the Archaeological Institute may be gratified by hearing the results of the late excavations on the site of the Old White Hart Hotel, situated in Stall Street, and on the side of that street opposite to the Pump Room, under which the interesting and important Roman remains were found when that building was erected, which are now deposited in the Museum of the Bath Literary and Scientific Institution, I have drawn up the following account, the materials of which have already appeared in some notes in the Bath Chronicle made by Mr. Irvine, clerk of the works now going on at the Abbey Church under the direction of Mr. G. G. Scott. Mr. Irvine has had free access to the site of the excavations, and faithfully recorded what has been found from time to time; having myself watched the progress of the work, and been in constant communication with the overlookers, I am able to confirm the correctness of his statements.

"Those who have visited Bath in past years, and stayed at the Old White Hart Hotel, will know that it was situated directly opposite the Abbey Church, which stands at the opposite end of the open space called the Abbey Churchyard. The Abbey Churchyard is separated from Stall Street by an open colonnade, which connects the Pump Room with the opposite side of the open space, the colonnade running between the Pump Room and Messrs. Arnolds' wine vaults, which now occupy the site of the ancient church of St. Mary de Stall, commonly known as Stall's Church, and which is stated in the Red Book of Bath to have been constructed partly out of the remains of a Roman temple. That another temple had stood on the site of the Pump Room seems probable, from the Roman remains found when the foundations of that building were dug; and these two edifices, therefore, seem to have represented two opposite sides of the ancient Roman Forum.

"Stall Street seems to run into the ancient Roman Forum at the eastern

end, and probably represents the ancient Roman road coming in from Walcot, and leaving the city by Southgate Street, and the bridge over the river.

"That the Old White Hart occupied the east end of the Forum, and that this end of the Forum was closed by an edifice of some considerable size and importance, appears clear by the remains which have been laid open in the course of the late excavations. Facing the present colonnade and the east end of the Pump Room, a solid bed of concrete has been found; measuring 24 ft. 3 in. from east to west, and 20 ft. 3 in. from north to south, with large stones placed upon it, forming the foundation of a temple or basilica, which has also been surrounded by a court and smaller buildings, the foundation walls of which have been exposed. These are being carefully mapped, so that the whole plan and arrangement of the building will in time be laid down, as the architects, Messrs. Willson and Wilcox, have taken every care that all particulars should be noted, as well as all the articles found carefully preserved; the larger ones being sent to the Museum of the Literary and Scientific Institution, and the smaller ones, I believe, are now being carefully drawn, with a view to their publication.

"The excavations were commenced in September last, but the removal of the superstructure had revealed two mediæval memorial slabs, incised with floriated crosses and inscriptions to ecclesiastics, the dates being on each, and happily not obliterated. They were dated 1525 and 1531, and may have formed part of the flooring of Stall's Church when it was pulled down and the White Hart erected about a century ago, or they may have been brought from the Abbey Church. These two slabs had been cut away on one side, so as to form the arch of a chimney-piece.

"As the excavations proceeded in depth, remains of different periods were brought to light. First came mediæval remains, as pottery, probably about the date of Edward I. Fragments of a glazed earthenware figure, being a knight on horseback, the head of the horse, the leg and foot of the knight, and part of the hindquarters of the animal were preserved (for a similar figure see *Archæological Journal*, vol. iv. p. 79). Soon after, a wall of Roman construction was come upon, 2 ft. 3 in. wide, the lower part being of herring-bone construction. This wall was based upon the blue clay.

"At the N.E. angle of the excavation a small piece of Roman road was cut through, formed of rough stones covered with fine gravel. This was a projection from the main street, and probably ran out of the old Roman main road, represented at present by Stall Street. Under a piece of this road was found a bronze pin. A rough Roman pavement was also come upon, partly destroyed; it was formed of concrete, covered with thin slabs of Pennant stone. This was close to the temple, of the concrete foundation of which I have already spoken. Next was found a good plain Samian bowl, broken in pieces, and two large moulded Roman stones, and afterwards some more; the best preserved of the larger measured about a Roman foot ($11\frac{1}{2}$ inches) thick; the larger ones had lewis-holes. Another Roman wall was soon come upon to the south of the first discovered. A drain or trench was found to have passed in very early Roman times under the place afterwards covered with the Roman floor already mentioned. A curious and interesting terra-cotta head, of Roman date, was found next. This has a

very Egyptian cast of features, and may have been imported from that country in Roman times. Two walls of Roman date were next discovered, the western one measuring in width 2 ft. 5 in., and the space between the two, 10 ft. 9 in., formed the width of a room divided by a cross wall. It seems probable that the whole formed the open court of a Roman building, with low, lean-to buildings round the exterior walls, and that the buildings of the new hotel occupy the greater part of the open court. The fragment of the cornice of a temple was found next, precisely similar to those preserved in the Museum of the Literary and Scientific Institution, which were found underneath the Pump-room.

"Strong rough stone flooring was also brought to light, of which the western edge was quite sharp and well-defined. As the excavations proceeded, it was ascertained that the solid mass of masonry which had been come upon, was the raised platform of a temple or other building of importance, and in several places shafts have been in more recent times sunk into it, to form cesspools; one was forced to the depth of 4 ft., through the solid stone walling. In this was found a fine fragment of pottery, probably of Saxon date. One of the rough blocks of Roman masonry, imbedded in the concrete, presented a sawn face.

"Later on was discovered the south wall of the temple, but only one course of the immense stones of which the lower part had been built, was remaining; one stone was more than 5 ft. long, and had a sawn face, so that the stone saws of the Roman masons could not have been less in length than those of the present day. Close to the south wall of this building, a beautiful piece of embossed glass was found, being apparently the under part of the handle of a glass vase, somewhat resembling that engraved in Mr. Roach Smith's *Roman London*, p. 121. It was found at a depth of 16 ft. 4 in. below the present level. Another wall of Roman masonry was discovered parallel to the south wall of the temple; and later on another stone of the south wall of the temple, which probably formed its south-western corner.

"The building seemed to run parallel to the present street, and to have been the eastern termination of the Roman forum.

"Beside the embossed glass above-mentioned, a large piece of what appears to be window-glass was found at the depth of 15 feet. It is 5 in. by 3, and has become perfectly iridescent. Several other pieces of glass were found at about this level.

"The bronze head of a spear about 6 in. long was also found, in a very perfect state, and several fragments of pottery, part of an amphora, and portions of small vessels.

"Several Roman coins have been found in the process of excavation.

"A brass coin of Marcus Agrippa: the obverse is defaced, but the reverse has on it the figure of Neptune holding a trident, with the letters S. C. on the right and left. The date of this coin is probably between B.C. 27—12.

"Another large brass coin, the same size as the former, is that of Antonia, daughter of Mark Antony, and wife of Drusus, sen., struck in the reign of Claudius.

"Besides these several smaller Roman coins of the Constantine family were found. They are not worth enumerating, but all are carefully preserved and will be catalogued.

"The Roman coins were all found *near the walls*. Also one of Antoninus

Pius; reverse, Britannia seated on a rock, A.D. 150. Another of Constantius, son of Constantine the Great; reverse, a horse soldier, riding down a prostrate enemy. 'Fel. temporum reparatio.'

"These were found at the level of the bed of concrete.

"The remains found before this lowest level was reached, or which were found in the wells or cesspools which had been driven into the concrete, were the following:—

"1. A two-light small window apparently of Saxon date, about 2½ ft. by 2 ft. A relic of the Saxon monastery which stood on the site of the abbey.

"2. Norman corbels, probably belonging to Stall's Church, or to the Abbey Church, before it was re-built, just previous to the Reformation.

"3. The fragment of a fine churchyard cross of rich Norman work, being the corner arm of the cross, and having in it part of an eagle, the emblem of St. John, and the circle which united the arms.

"4. Some fragments of Norman and Early English carving formed the lining of a well which had been sunk about 15 ft. deep and roughly paved at the bottom. In clearing it out, the lower portion of a fine Perpendicular column was discovered. This probably formed part of the Perpendicular Rood Screen belonging to the Abbey Church. In the well was also found an old bucket, and a collection of remains of pottery, of a later date than A.D. 1500.

"5. Weatherings of Perpendicular buttresses were also found in removing the old building of the inn, and several portions of Gothic window tracery, a Perpendicular piscina, and the fragment of a large sitting figure.

"6. An original square-headed Gothic window, with a stone mullion, was opened in the ancient walls of the building, giving the probable date of the oldest parts of the inn which has just been removed to be not earlier than the middle of the sixteenth century. The back wall was very thick.

"These are the principal remains that have been found in removing the Old White Hart Hotel, and clearing the site for the foundation of the New Pump Room Hotel, which is now fast rising, and promises to be an important feature in this part of the city, and which will represent the eastern termination of the old Roman Forum."

Mr. R. H. SODEN SMITH, M.A., F.S.A., read some "Notes upon the Trésor de Petrossa." "The 'Trésor de Petrossa' ranks among the most important monuments that are known to exist of the goldsmith's art of its period. It consists at present of 12 pieces out of 22, which were originally discovered in the neighbourhood of Petrossa, a village of Roumania, in the year 1837.

"Roumania, the present name of the Danubian Principalities, is part of what was anciently the Roman province of Dacia—a country possessed in turn by various nations, and amongst others by Gothic tribes.

"The 12 pieces are—a large salver with its ewer, a patera or bowl, two double-handled vases or cups, a gorget, four fibulæ or breast ornaments, two neck-rings; all of gold, more or less massive. None of them are mortuary ornaments. Their intrinsic worth is great, but this is far surpassed by their archæological interest.

"The neck rings are of a type not unfrequent both in gold and bronze,

plain rounded, not twisted or otherwise wrought or decorated, except that the heavier specimen has coils of stout gold-wire round the ends ; they fasten with a plain loop and hook. A neck-ring with similar looped fastening was found at Rouan, Department of Aube ; another, but of elaborate workmanship is in the Museum of Copenhagen ; others of bronze have occurred in various localities, as one in the Island of Funen, in Mecklenburg, &c. Armlets of gold of similar type also occur ; one is in the British Museum ; another, but without the looped fastening, was discovered in a grave believed to be that of a Gothic chieftain in the south of France, where also a signet ring, with the name HEVA, was found.

"It is not easy to fix the date of these neck-rings, as their fashion seems to have prevailed widely and over a long period of time ; I think there is no doubt they were in use among Gothic nations.

"The larger specimen of these two possesses a peculiar interest, as there is traced upon it a line of runes. Careful copies of these have been made and it is hoped they may be deciphered. The patera, a circular dish of about 10 in. diameter, with figures in *repoussé*, and a seated draped figure in the centre, is of Byzantine work, of about the end of the sixth century. It resembles in general form bowls or dishes frequent in Albania.

"The large circular salver about two feet in diameter, and the tall ewer of the same workmanship, resemble objects now in use in the ceremonies of the Greek Church : they appear to belong to about the same period and country as the objects which remain to be noticed.

"These are two vessels or vases, and four fibulæ or breast ornaments ; the latter it is stated are similar in general character to objects still worn by ecclesiastics of the Greek Church on occasions of religious ceremony. All these objects as well as the remarkable gold gorget are chiefly characterized by the inlay work in garnets, &c., with which they are covered. The handles of the cups are sustained by leopards, whose spots have been represented by carbuncles and pearls. Several points in the style and workmanship of these objects indicate an Oriental influence. The inlay with thin glass pastes and with slices of garnet over foil was a style of ornament apparently much in use among Gothic nations, and was practised in various parts of Europe, at least from the fifth century downwards.

"The treasures of the tomb of Childeric (d. 481), show various examples of this work : these objects of the highest antiquarian interest have well been called the starting point of Frankish archæology, their date being indisputable, and their workmanship full of character.

"The votive crown of the Gothic king Reccesvinthus (d. 672), now in the Museum of the Hôtel Cluny, and that of King Suintila, in the Royal Library at Madrid, also of the seventh century, exhibit similar work : these were part of the wonderful treasure-trove of Guarrazar, near Toledo. The diptych, the 'theca aurea' of Queen Theodelinda, in the Treasury at Monza, is another example also of the seventh century. Many other instances may be cited carrying the work down to a later time, as the objects in the Treasury at Aix-la-Chapelle ; also the Saxon brooches with diapered foil beneath the garnets, Carolingian rings, &c.

"The work, therefore, of the present specimens seems to be certainly Gothic, and their date about the end of the sixth century. The chains suspending the pendants to the fibulæ are to be noticed ; they are of

that peculiar and rather complicated pattern called now Trichinopoli, a pattern used in ancient Egypt and Assyria by the Etruscans, from whom the Romans might have derived it ; by the ancient Irish, a portion of such chain being attached to the Tara brooch ; here by Gothic workmen ; and now modern Europe continues to be supplied with it from India. It may be that the traditions of goldsmith's work, which are among the most durable of all traditions, have had in more cases than is yet known a common origin."

Mr. J. G. WALLER read some remarks upon a coat of mail of Asiatic workmanship of the fourteenth century, exhibited by Mr. W. J. Bernhard Smith.

"The coat of mail exhibited is of Asiatic workmanship, and not a fine specimen of execution. Its interest consists in the collar, which appears to explain a conventional representation of a species of mail common during the fourteenth century. The drawings exhibited, one from a brass at Westley Waterless, Cambridgeshire, the other from an incised slab at Dijon, show the kind of mail alluded to.

"But before I proceed to point out the analogy, it will be necessary to review, briefly, what has been written on this subject. The first scientific attempt at a history of chain mail was given by the late Sir S. Meyrick in the 19th vol. of the *Archæologia*. He divided it into many varieties, many of which were merely hypothetical, being deceived by the conventional modes of representation. I will just notice three of these, because they bear directly on our subject ; viz., *Single Mail*, *Double Mail*, and *Banded Armour*.

"*Single Mail* he described as being made of rings set edge-wise on a linen tunic, and he thought that all our early effigies previous to the thirteenth century were of this description. He never examined the matter practically, or he would have seen at once that such a construction was an absurdity. I exhibit a fragment of a hauberk of the end of the fourteenth century, when plate-armour was extensively used. It is remarkable for its exceedingly light construction, the rivetting rings being as thin as a wafer. It is not quite enough to cover the arm, but it weighs $3\frac{1}{2}$ lbs. An entire sleeve of this construction would weigh $4\frac{1}{2}$ lbs. But to construct a sleeve of single mail would require six times the number of rings, consequently the weight would be 27 lbs. for each arm. The Life Guards' cuirass weighs 14 lbs. Following out the quantities required for a complete equipment, viz., hauberk, chausses, and camail, I find the total covering of a knight would be 252 lbs., exclusive of helmet, shield, sword or lance. The unfortunate knight so weighted would find it extremely difficult to fight, but impossible to run away. This would not be the worst ; this cumbrous armour would be no defence at all. The rings would naturally have a tendency to gape on the outer edge, and would easily admit every blow from a sword, or thrust from a lance. No one, of course, ever saw a coat of mail of this construction, and we may safely conclude that no one ever will.

"*Double Mail*, a term often occurring in old romances, Sir Samuel considered to be the interlaced mail, and not earlier than the thirteenth century. But, in fact, *double mail* is the interlaced mail, with double the number of rings in the same space interwoven together. Of this we have examples, and I believe later in life the author alluded to changed his opinion on this point.

"The antiquity of interlaced chain-mail is a very interesting question, and although it was not doubted by many that all our early effigies were intended to represent this fabric, yet it was very difficult to show any instances earlier than the thirteenth century, if indeed so early. The first fact that seemed to throw it back into an earlier antiquity, that I became acquainted with, was at a dealer's shop at Cologne in 1850. I was in company with Mr. Roach Smith, and in the shop were the contents of an interment of the Frankish period, found in a vase with a human skeleton, at St. Severinus, in that city. Among the objects, the first thing that caught my eye was a very small portion of chain-mail, 14 rings, just sufficient to show that the principle of construction was understood. The collection was purchased, and afterwards passed into the hands of the late Lord Londesborough. Since this, however, we have obtained a specimen of a far greater antiquity. This is an Assyrian helmet in the British Museum, to which a small portion of chain-mail is attached, a very important fact, as we may now safely conclude it was known to the Greeks and Romans, and that the *Lorica Catena* of the classic writers, on which Sir Samuel wrote a very learned memoir in the *Archæologia* to prove that it was not interlaced mail, may probably be now assigned to that kind of fabric.

"I now come to the *Banded Armour*. In this Sir Samuel confesses himself puzzled, but suggested it might be composed of small parallelogramic pieces of metal sewed on linen, so placed as to fold perpendicularly over each other, like palings, and kept in their places by bands or hoops of leather. Doubtful of this suggestion, at the close of his memoir, he thought it might be only padded and stitched work. I refer to the examples to show that neither solution will conform to the conventional characteristic, which show rings without any doubt between bands. It has been a very general opinion that these bands must have been of leather, but the manner of application as an accessory to defence has not been decided. I consider that we need travel no further for a solution, but have it here in the collar of this coat of mail; it simply consists of thongs of leather passed through each alternate row of rings, thus stiffening the substance, and adding an additional protection, of a material that was not heavy, and that, one way or the other, has always been largely used in military body defences. The coat of mail from Goojerat, kindly sent for reference by Mr. Bernhard Smith, has a collar of the same character, but the intermediate row of rings being exceeding small, are concealed by the leathern bands, so that its appearance does not illustrate so completely the banded armour or mail of the fourteenth century as that to which I allude. The appearance coincides with the representation, as far as need be, for we must never expect a convention to follow closely in details. No other means are so simple, and I therefore think we have here the solution of a somewhat vexed question.

"The fragment of a hauberk, which I exhibit, I believe to be of about the year 1360. It is interesting for the different sizes of rings employed (there are three different diameters), and also for the extremely light character of the riveting row of rings, for they are as thin as a wafer. In effigies of about 1340 to 1370, we often find the arms covered with mail having the rings made of a smaller size, because the use of plate now begins to cover parts of the body, and the inner parts of the arms only show mail. The addition of plate compelled the construction of

the hauberk to be reduced in weight, so that in less essential parts it was made much weaker, as we see in this specimen, and also in the effigies of the period alluded to."

Mr. J. HEWITT made some remarks in contravention of the conclusions arrived at by Mr. Waller.

Mr. E. KYNASTON BRIDGER gave an account of the discovery of a reliquary of alabaster in a hole in the cliffs at Caldy Island, Pembroke-shire, while digging out a wild cat which had taken refuge there. It measured when entire about eight inches in length, but a portion of one end—apparently about an inch—has been destroyed. It is oblong in shape, with the two ends in front beveled off, is hollow, in 3 compartments, into which Gothic perforations open, and is surmounted by a recumbent figure. Traces of colour are visible on the outside, and the reliquary has evidently been attached to a wall. This curious object will be more fully noticed and figured hereafter.

The Island of Caldy, which formerly belonged to the Abbey of St. Dogmaels, contains some interesting monastic remains, of which a leaning tower surmounted by a spire of stone is a prominent object.

Dr. Rock referred to the existence of other examples of similar objects, and thought that before the suppression the present specimen had been hidden for safety.

Antiquities and Works of Art Exhibited.

By the CHAIRMAN. Steel die of the official seal of John Morgan, Esq., of Tredegar, in the county of Monmouth, who was Lord-Lieutenant of the counties of Monmouth and Brecon, and Custos Rotulorum of the county of Monmouth from 1700 to 1720. His descendants held those offices and honours till 1787, since which time the seal must have been disused and lost; its history is not known, but it was found last summer thrown aside as an old bit of iron in the kitchen of a farmhouse near Usk, and on clearing away the dirt which covered it, it proved a very finely engraved steel seal. On an impression being shown to Mr. Morgan, he at once recognised it as the seal of his ancestor, having long been familiar with its impressions in wafer on official documents of his time.

It is a fine example of heraldic seal-engraving on steel, of the date of 1700, and it is surprising that it should not have sustained more injury from rust during so long a period of misuse and neglect. It contains 20 coats-of-arms, carefully selected from the family shield, to show the various alliances which the family of Morgan of Tredegar had made with the heiresses of different families from the middle of the eleventh century down to 1700. Most of the coats are well-known and well-established Welsh arms of the earliest period.

By the Rev. F. HASLEWOOD. Copy of the drawing of the altar of St. Augustine's, Canterbury; it was lately found in a carpenter's shop at Herne Bay, and had every appearance of being an original. The engraving of that subject in the Monasticon was from a drawing in the library of Trinity Hall, Cambridge, and had variations from the present drawing.

By Mr. L. O. PIKE.—Flint implements, &c., found in Lough Neagh, Ireland. They were of delicate construction, and some were exceedingly sharp. In the *Kilkenny Arch. Jour.*, vol. v., part 2, pp. 226—8, the following account is given of the discovery of these objects:—

"On the Northern Counties Railway, within two hours' drive of Belfast, is the Toome Station, which takes its name from Toome Bridge, a secluded peaceful village, nestled among old trees, and bounded on the south by Lough Neagh, and on the west by the River Bann, which here flows out of the lough on its course to join the Atlantic, below Coleraine. The bridge which spans the river at Toome forms a connecting link between the counties of Antrim and Derry. The Lough presents at this place the appearance of a great V, having the space between the points filled with a plateau of sand, known as Toome Bar. This is almost invariably covered with from two to three feet of water. Barton, who published a work on Lough Neagh, Dublin, 1751, says, 'that before the autumnal season of the year the water discharged at Toome is very inconsiderable, so as not to afford a depth greater than that which may reach to a shoe-buckle, or the knee of a person wading; and once it happened that a person, taking advantage of an inblowing wind, walked over dryshod. Unfortunately, when I visited the place, the wind was in a contrary direction, and the water reached above the knee; but my guide informed me that, owing to the dryness of the summer, the whole surface of the bar was, at one period of this year, dry. Strewn upon and imbedded in it are logs and barks of timber, some of which bear the marks of fire, while others still retain their upright position; these must have been placed here artificially, as the bar of sand extends fully a quarter of a mile into the lake, outside of which there is deep water; and if by the force of the water they had been thrown up here, it is equally probable they would have been swept by the first winter flood into the river, and thence to the sea. From this it may be inferred that there was here, at a very remote period, a crannoge or lacustrine dwelling. The sites for such habitations were, when practicable, always chosen either where a river flowed into a lake or *vice versa*, these being the best fishing grounds. And here nature may be said to have formed a site which is unequalled. From the large number of flint weapons, &c., which I found lying on the surface, and slightly imbedded in the sandy bottom, it is more than probable that they were used by the dwellers in this island village. Flint is not found in its natural state within seven miles of Toome, so that it must have been brought home, and manufactured in the crannoge. I searched in vain for a fragment or nodule similar to those which may be found in any gravel heap, but all I saw had the evident marks of chipping; some were thrown away, owing to the imperfect character of the flint, while others were perfectly formed, and more were broken, either in the process of making or in use. But the most positive proof of their having been made here is, that the large cores of flint from which the weapons were struck were also found. All these flint flakes are of the earliest type, many closely resembling those found in the 'drift' at Abbeville, and many like those brought home from the Dordogne Caves by Messrs. Lartet and Christy. Some ten or fifteen years ago the Commissioners appointed for deepening the River Bann had occasion to infringe on this sand bed, and in it antiquities of great variety, belonging to the Stone and Bronze periods, were found. These were deposited in the Museum of the Royal Irish Academy; and any person looking over the Catalogue of this National Collection, must be struck with the frequency with which Toome Bar appears in connexion with bronze swords and spear heads, or with the

more peaceful relics of a bygone age, the ring brooch, enameled bead, or silver armlet. Lough Neagh, like nearly all the other lakes in Ireland, has its traditions and legends, in which the peasantry implicitly believe. And when Moore wrote the lines—

‘On Lough Neagh’s banks as the fisherman strays,
When the clear cold eve’s declining,
He sees the round towers of other days
In the waves beneath him shining’—

he but perpetuated in undying verse the belief which the dwellers on its shores possess, that beneath the present waters was once a thickly populated country; but, owing to the ‘evil living of the men who dwelt therein,’ it was suddenly submerged by a just God; and that even to this day may be seen, beneath its placid waters, the round towers, ‘the high-shapen steeple,’ and the crumbling wall, of ruined cities. May not this tradition be the faint remembrance of the lacustrine inhabitants?”

A number of similar objects, from the same locality, were exhibited about two years ago at a meeting of the Society of Antiquaries by Mr. Evans, who then directed attention to this flinting-ground.

By Mr. WALLER.—A fragment of a hauberk of chain-mail of the fourteenth century.

By Mr. W. J. BERNHARD SMITH.—A jerkin and cap of chain-mail, taken at the battle of Goojerat. The jerkin is remarkable for the



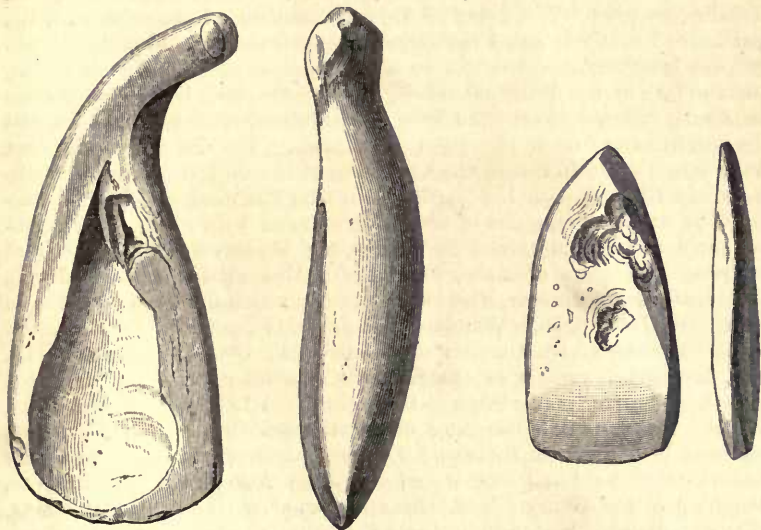
Sepulchral urn found at Plas Heaton, Denbighshire. Height 8 inches.

manner in which its collar is stiffened by the interlacing of leathern thongs.

By Mr. W. WYNNE FFOULKES.—A sepulchral urn of the “drinking

cup" class, found in 1851 in a barrow at Plas Heaton, Denbighshire. It lay in a stone cist with a human skeleton, and had apparently contained some liquid.⁵

By the Rev. GREVILLE J. CHESTER.—A collection of Carib implements and tools, from the West Indies. They are formed of the great conch shell, and were the implements used by the early inhabitants of the islands, who have now entirely disappeared. The implements had been buried, and were found in gullies or on the coast after heavy rains. The natural curve of the shell had been skilfully turned to account so as to fit the hand. It appears, by Schomberg's History of Barbadoes, that few of the aborigines existed when the island was occupied by English settlers in 1625; they were either enslaved or exterminated. The island must at one time have been thickly peopled by Indian or Carib tribes, as shown by the quantity of pottery, with implements of stone and shell (*Strombus gigas*) which have been found. The latter are of three kinds:—those with central grooves, or cavities, and handles; those without any groove or handle; and hones for rubbing down the shells in forming the im-



Length 5½ inches.

Length 5½ inches.

Carib Implements of shell and stone found in Barbadoes.

plements. He had seen only fragments of very rude pottery, closely resembling some of the Celtic wares of the British islands. Two objects with bluntly rounded ends, somewhat dilated, may have been portions of pestles for preparing food, such as the dried root of the manioc or capava. These were found at Conset Point, Barbadoes. The implements occur in the surface soil, and especially in caves or under rocks, and in caves that seem to have been the favourite habitations of the Caribs. Schomberg states that figures of pottery, one of them possibly an idol, 6 ft. in height, have been found in the parish of St. Lucy; also part of a disk, of close-

⁵ Arch. Camb., N.S., vol. ii. p. 274.

grained clay, found with the shell implements, near Conset Point. Humboldt states that South American tribes keep such cakes of clay in their huts to stay the cravings of hunger by distending the stomach. Mr. Chester imagines that the disk in question may have served a like purpose.

By Mr. HORNER, Mells Park, Taunton.—A circular dish of brown ware, highly glazed, with light-colored ornament under the glaze, the white much cracked, the edge serrated; time of James I. Found (together with a stone hammer) at Street-by-Walton, Somerset, six feet deep in peat moss.

April 3, 1868.

Mr. E. SMIRKE, Vice-Warden of the Stannaries, in the chair.

The Chairman announced that Colonel the Right Hon. J. Wilson Patten, Chancellor of the Duchy of Lancaster, would preside at the annual meeting of the Institute to be held at Lancaster in July next.

A paper was read, communicated by Mr. W. WILBERFORCE MORRELL, of Selby, entitled "The Askes of Aughton, and their connection with the Yorkshire Rebellion, called the Pilgrimage of Grace, A.D. 1536."

After briefly relating the history of the rising as recorded by historians, and the fate of the principal rebels, the paper afforded some additional facts with reference to the family of the ill-fated leader, Robert Aske, and the localities in which the event took place. The ancestors of Robert Aske were careful to record their pedigree at the different heralds' visitations. In Glover's, A.D. 1584, it is stated that the windows of Mr. Aske's house at Aughton (the site of which, surrounded by a moat, is still prominently visible), contained 25 shields, which are carefully drawn, and comprise the arms of Aske, Ughtreight, Walton, Langton, Fitzhugh, Gascoigne, and Latimer. The earliest record which has been traced is in Harl. MS., 1394, p. 76, which dates the origin of the family from Richard Aske, "founder of the Chantry of Howden" in 1365 (39 Edward III.), who, in another version of the pedigree at a later visitation, is exalted into the "founder of the Abbey of Howden." His grandson, John Aske, married Elizabeth, the daughter of Sir William Gascoigne, the Justice; the next in succession, Richard Aske, married Margaret, daughter of Sir Robert Oughtred; his son, styled Sir John Aske, married Elizabeth, daughter of Sir Henry Bigod, whose son was concerned in the Rising. He was succeeded by Sir Robert Aske, who raised the importance of the family by his marriage with Elizabeth, daughter of John Lord Clifford, son of the Earl of Cumberland (whose seat at Londesborough was in the immediate neighbourhood), Clifford's brother having shortly before married a daughter of the Duke of Suffolk, and therefore a niece of Henry VIII. John Aske, the head of the family at this time, married Elizabeth, daughter of Sir Rauf Ryder, Knight, of Ryther. It was his two brothers who took opposite sides in connection with the Rebellion. The loyalty of Christopher, the elder, appears to have been suspected, from the fact of his relationship to the younger brother, Robert (Mr. Froude is in error in calling Robert the second son); and in the proceedings following the defeat of the rebels, he found it necessary to defend his conduct. How nobly he was able to do this appears from his narrative preserved at the Public Record Office in London (State Papers, Domestic, Henry VIII.,

No. 840), which gives a most graphic account of the whole rising, and which is, as yet, unpublished.

The parish church of Aughton still exhibits a prominent memorial of the loyalty of Christopher Aske. The chancel dates probably from the eleventh century, and contains two brasses of the family, with incomplete inscriptions; but the tower, which is of Perpendicular style, and was probably erected by Christopher Aske in memory of these events, bears, conspicuously carved on the buttresses, a shield bearing an aske or newt, the rebus of Aske, and on the tower seven large shields with quarterings of the family. The central one bears, surmounted by a crescent, quarterly of six: 1, *or*, 3 bars *az.*, the original arms of the Askes; 2, a cross engrailed; 3, a fesse dancette (Oughtred); 4, a cross; 5, on a chief, three besants; 6, on a chief, two mullets between a bird's head (Hayes): on either side are shields of other quarterings of the family, and below, the following inscription in Norman-French:—"Christofer le second fitz de Robart Ask, Chr. oblier ne doyt A. Di. 1536." The family were intimately connected with the old order of things which were now so rapidly changing. John Aske was prior of St. Augustine's Monastery in Friargate, York, which he surrendered, 30 Henry VIII. (1538), when it had six friars, and a revenue returned at 180*l.* a-year. Of the prominent participators in the Rebellion, Sir Francis Bygod, who was executed, was a second cousin of Robert Aske; Sir Ralph Bulmer married his sister Anne; Sir Robert Constable was a relative of the grandmother of the two Askes; Christopher Stapleton of Beverley, who was concerned at the commencement of the outbreak there, married an Aske; and Ellerkar, who held Hull for the king, married Agnes, another sister of Robert and Christopher Aske.

The family continued its importance for several generations after these events. Robert Aske, of Aughton, who succeeded, married the daughter of Sir Ninyan Markynfield, whose son Robert was high sheriff of Yorkshire in 1588. This Robert had six children, three of whom married into the family of Fairfax, which was then rising into importance; Eleanor marrying Thomas, the first Lord, the father of Lord Ferdinando, and grandfather of Sir Thomas Fairfax, the celebrated parliamentary general. We have these incidental notices of later members of the family. One of the sons, in a subsequent pedigree, is styled "a goldsmith of London," and others as students at the Temple and members of the Bar. Lord Ferdinando Fairfax, in his will dated 12 March, 1647, leaves "to his cousin, Richard Aske, Esq., 10*l.*;" and in 1640, writing to his brother Henry, the amiable rector of Bolton Percy, says, "My cousin Aske and his wife remember them to you. I think neither of them will come down to the country for the summer. He is in lodgings again, and in reasonable practice." The name of Aske has passed away from the village, but not from the district. The Fairfaxes still retain some of the property of their ancestors in the parish, and thus, by a curious coincidence of history, the descendants of almost the last soldier who died on behalf of the ancient belief, became the heroes of the advanced faith of a later generation.

Mr. SHURLOCK, of Chertsey, communicated the following notes on a recent discovery of Anglo-Saxon remains at Shepperton-on-the-Thames.

There have been found recently in digging gravel on Shepperton Range, on the banks of the Thames between Chertsey and Walton, various ancient relics that have been ascribed by Mr. Franks chiefly to

the Anglo-Saxon period. They consist of a bronze fibula, an iron spear-head, and numerous fragments of pottery, some of which seem to belong to an earlier age, and have been pronounced Roman. These objects were found amongst human skeletons, of which eight have been disinterred, at a depth of about a foot below the surface; all of them deposited in the same direction, towards the East. It is remarkable that in the ground above these skeletons were found bones of the ox; whether these may have been accidentally deposited subsequently to the interments, or should possibly be regarded as vestiges of the funeral feastings, as has been inferred in some other instances, must be left for further consideration. It were much to be desired that some careful exploration should be made on the spot; hitherto the relics that have been obtained have been collected chiefly in the process of riddling the gravel, and remained unnoticed until they were thrown heedlessly into the sieve. It is hoped that excavations may be made hereafter under competent direction, and there can be little doubt that some interesting information must be the result. It will be remembered that the spot is at no great distance from places where doubtless, at various periods, the passage of the Thames was disputed strenuously, and the banks of the river became the scene of deadly conflict. Not far to the eastward is the position of the memorable ford, at Coway Stakes, that has been the subject of so much controversy. Numerous British and other relics have been found in the neighbourhood. Vestiges of the Romans also are not wanting in these parts: the small entrenched works near Chertsey are doubtless to be ascribed to them, and Roman relics, coins, &c., have occasionally been brought to light. Any fresh evidence that may aid our investigations of the disputed occupation of this district cannot fail to prove of considerable interest, and may tend to establish some historical fact heretofore in obscurity; it is moreover obvious that such discoveries near the course of so important a natural boundary or defence as the river Thames should always claim attentive consideration. The relics are fully described, *Proc. Soc. Ant.*, Ser. ii. vol. iv. p. 118.

A notice of the Sepulchral Brass in Wimborne Minster, Dorset, commemorative of Ethelred the Elder, by Mr. ALBERT WAY, was then read.

“On a recent visit to Wimborne Minster my attention was drawn to the little memorial brass, the demi-figure of the Saxon martyr, brother of Alfred. It is probable that when that remarkable church and the sumptuous sepulchral sculptures there to be seen were inspected by the members of the Institute, on occasion of their visit during the Dorchester Meeting, in 1865, the comparatively obscure little memorial of the king of the West Saxons may have scarcely been noticed. It is moreover to be regretted that, in the pressure of other attractive subjects brought before the archæologists assembled at Dorchester, time proved insufficient for reading an interesting communication that had been prepared for their gratification by a Dorsetshire antiquary of well-known attainments, Dr. Wake Smart, M.D., of Cranborne, and who unfortunately was unable, through ill health, to be present as their cicerone in the visit to Wimborne Minster. In that memoir, Dr. Smart had brought together all the particulars relating to the sepulchral brass under consideration, and also to the uncertainty in which the later part of the reign of Ethelred the Elder and the time of his death are involved, in the conflicting statements of the various chroniclers. It is with pleasure that I take this

occasion to advert to the interest of Dr. Smart's communication, that was thus unfortunately lost to our Society, and I would also express my esteem of his friendly readiness to aid my inquiries in regard to any antiquarian subject of research in his county.

"I have now to submit to the Society the rubbing that I lately took of the sepulchral brass at Wimborne, the only royal example of that kind of memorial that occurs in the large series of engraved monumental portraitures of this description preserved in England. It has been figured on a reduced scale, and not very accurately, in Hutchins' History of Dorset; also in Carter's Sculpture and Painting in England, where may be found some account of it from the pen of the learned Dr. Milner; and lastly, a very diminutive woodcut of the demi-figure has been given by Mr. Haines in his Manual of Monumental Brasses.⁶ The date 1440 has been ascribed to the memorial by Mr. Haines, who observes that the inscription beneath the demi-figure may probably have been a restoration executed about 1600, the original inscribed plate by which the little memorial had been accompanied having been lost.

"It may be supposed with considerable probability that the remains of Ethelred, who although never formally canonized, was accounted as a saint and martyr, having perished in conflict with the Pagan Danes—'per manus Dacorum'—about the year 871, had been enshrined in some suitable depository of the fashion familiar to us by ancient examples of art and by illuminations, namely, a high-ridged chest, that may in its first intention have been the actual coffin in which the corpse was placed. Frequently, however, it assumed the form and rich decorations of the sepulchral chapel, and of this description almost invariably are the feretories and shrines that enclosed the relics of saintly personages, alike in our own churches as in those of foreign lands. Such a raised structure, however, might sometimes be found an inconvenient incumbrance in the limited space of a choir or presbytery; and on that account, obviously, it might in some few instances be removed, and its original position marked by another memorial more conveniently adapted to the requirements of the church. In the earlier half of the fifteenth century, the time to which the figure of Ethelred should be assigned, engraved memorials of metal and stone were much in use, and it has been suggested, with much probability, that the shrine or raised tomb of the martyr might at that time have given place to a more simple memorial, on a level with the pavement of the presbytery. The little brass is now to be seen on the north side of that part of the Minster, and immediately above the upper step, namely that nearest to the east end of the church. It is attached to a slab of Purbeck marble, of which a small portion only is now visible, the surface of the remainder of the slab having been cut away, as I was informed by the clerk, so as to admit of an incrustation of decorative heraldic tiles that have been introduced a few years since in the whole of the eastern part of the fabric, when considerable 'restorations' and embellishments were carried out.

"The half-figure of the Saxon king measures 14 in. only in height; he appears in the usual regal costume of the earlier half of the fifteenth century, a robe with a close cape of ermine reaching nearly to the elbows; the form of the crown also agrees with that period. The upper part of the short sceptre is lost, and appears to have been broken off previously

⁶ Vol. i. p. lxxiv., published in 1861. See also vol. ii. p. 51.

to 1789, when Carter made the drawing from which the engraving was executed for his Sculpture and Painting in England. Under the demi-figure there is a small oblong plate, with an inscription in plain Roman capitals, as follows :—

IN HOC LOCO QUIESCIT CORPUS S^{TI} ETHELREDI REGIS WEST SAXONUM
MARTYRIS QUI AÑO DNĪ 873, 23 DIE APRILIS PER MANUS DACORUM
PAGANORUM OCCUBUIT.

“This plate is of copper, or some reddish-colored mixed metal, the demi-effigy is apparently of the hard latten plate, with which we are familiar as the material used for sepulchral brasses previously to the sixteenth century, and usually found encrusted with an uniform dark-green *patina*. Under the inscription there is an escutcheon of metal that seems to differ in its quality from that of the other two portions of the memorial. It is charged with a cross patonce, being probably the coat that has been assigned to Egbert, grandfather of Ethelred; that apocryphal bearing has been variously blazoned, namely, as *azure* a cross patonce *or*, and also *azure* a cross patonce counterchanged *or*. In the present instance the field of the escutcheon has been coarsely tooled with vertical lines and rows of intermediate punctures, probably intended to retain some superficial color, but not sufficiently deep to serve as a case-ment for enamel. As vertical lines express gules in engraved coats of arms, it may be inferred that there was no intention of showing on this escutcheon the color of the field, which was probably indicated by some pigment that has scaled off.

“In the curious library, still well furnished with ancient volumes of venerable aspect and attached by chains to iron rods around the little chamber, approached by a narrow newel staircase from one of the corners of the vestry, I found a second inscribed plate differing slightly from that now to be seen accompanying the figure of Ethelred, the chief variation being that it gives 872 instead of 873 as the date of his martyrdom. The metal of which this inscribed plate is composed is different from that of any of the portions of the memorial as already described; the letters are Roman capitals, somewhat smaller and more carefully engraved, with foliated scrolls filling up the spaces at the ends of two of the lines. The date of this plate, which bears on the reverse portions of the work of some earlier memorial, seems to be the sixteenth century; possibly some restorations may have been made, as Dr. Milner has suggested, during the time that Reginald Pole, afterwards Cardinal, was Dean of the Collegiate Church of Wimborne, between 1517 and 1537. This would well agree with the narrative of Leland, who commenced his Itinerary about 1538, and who made his inspection on his circuit from Dorchester by way of Lulworth and Poole.⁷ He observes that ‘the town of Winburn is yet meatly good and reasonably welle inhabitid.—The Chirch of Winburne Minstre was first a Nunnery erectid by S. Cuth-burge.’ He proceeds to state that she was buried in the north side of the presbytery—‘King Etheldrede was byried by her, whos Tumble was lately repairid and a marble stone ther layid with an image of a King in a plate of brasse, with this inscription,’—and he gives the memorial in the same words as already noticed, with the exception only that the date

⁷ Itin. iii. f. 54.

of the martyr's death is given as 13 April, 827 ; a discrepancy, doubtless to be regarded as an error of transcript, which occurs likewise in a second entry of the inscription to be found in a subsequent part of the Itinerary.⁸ I may also notice that Leland gives, in the concluding line, the reading—Danorum Paganorum—instead of *Dacorum*, as found on the inscription that now accompanies the effigy on the floor of the chancel, and likewise on that above noticed as preserved in the library. Camden, who has likewise noticed the interment of Ethelred at Wimborne, and given the inscription, in his *Britannia*, in 1607, printed the word Danorum, and mentions that the memorial had been—'non ita pridem restauratus'—not long since restored. It is scarcely needful to observe that the name *Daci*, although *Dacia* properly designated a country of more remote parts in Eastern Europe, was frequently used to express the inhabitants of Denmark. I believe that St. Clement Danes, in the Strand, so called because Harold was there buried, is sometimes described in old documents as 'Ecclesia Clementis *Dacorum*,' and Geoffrey of Monmouth writes repeatedly of Denmark as *Dacia*.

"The duplicate inscription, which is now to be seen, as I have observed, in the library, was brought to light some years since, as I was assured by the clerk, concealed in one of the books. Rapin has stated that the brass plate with the inscription given by Camden was taken away in the Civil Wars ; this may, however, be the plate in question subsequently recovered from the spoiler. In regard to the curious points of difficulty connected with the place and manner of the death of Ethelred by the cruel hands of the Danes, whose frequent incursions brought so much misery into the southern parts of Dorset, I may refer any one who is curious to pursue the enquiry to Dr. Smart's careful investigation prepared, as before noticed, for our Annual Meeting in Dorset. I sincerely regret that a little memoir of so much historical interest was unfortunately transferred to the pages of Sylvanus Urban, instead of finding a welcome in our own Journal." See *Gent. Mag.*, 1865, vol. ii. p. 708.

Mr. TREGELLAS called the attention of the Institute to the probability—owing to the projected operations of a Building Society at Bromley—of the picturesque ruins of the fortified residence known as "Simpson's Moat," near Bromley Railway Station—a familiar object to most passengers by the London, Chatham and Dover line—being soon destroyed ; and he urged such Members as were interested in the Domestic Architecture of the Middle Ages to pay a visit to the spot before it was too late to find any traces of the few crumbling fragments which still remained.

Mr. Tregellas gave the following account of Simpson's Moat, as the result of a personal inspection of the place (of which a view and a plan will be found on the opposite page), and of a perusal of Philipot's *Villare Cantianum*, Hasted's *History of Kent*, Lysons' *Environs of London*, and Dunkin's *Outlines of the History and Antiquities of Bromley, &c.*

The original structure appears to have been a quadrangular fortified building, surrounded by a moat, 25 or 30 ft. wide, on all sides.⁹ The

⁸ *Itin.* vol. iii. f. 96.

⁹ The moat on the north-west and south-west sides was filled in by Jeremiah Ringer, who was the last tenant of Simpson's Moat, and occupied the

place for more than 50 years. He gave the name to Ringer's Lane, the approach to the moat from the turnpike road.

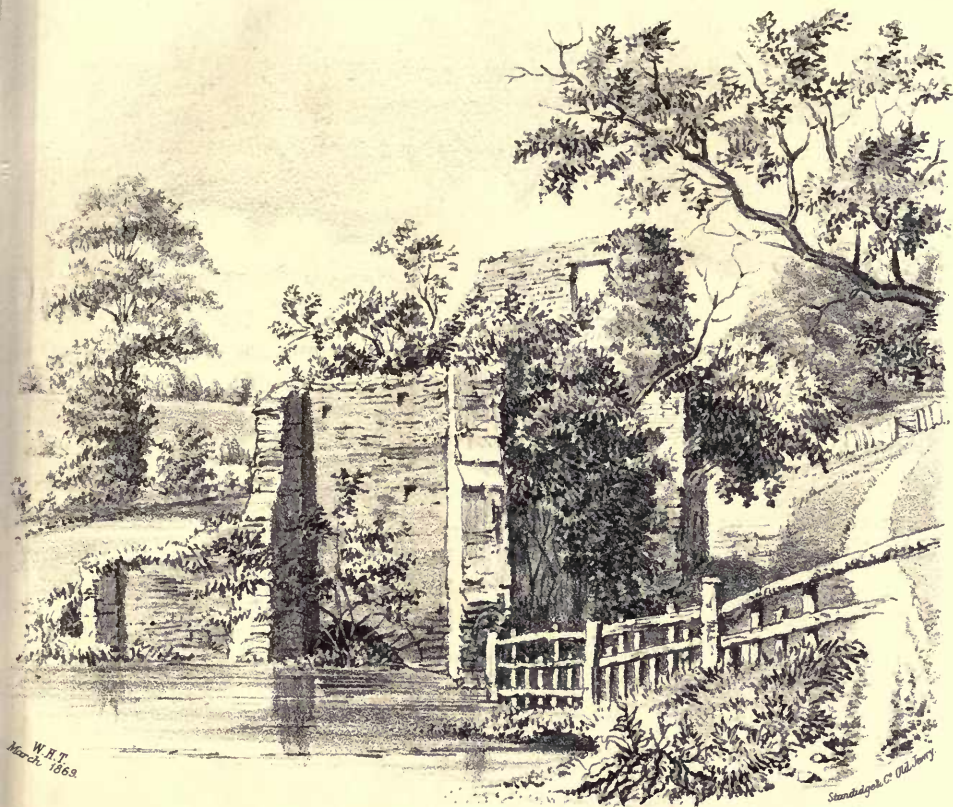
walls, strong and lofty, supported by very substantial buttresses at the sides and angles, and built of flints and rubble masonry ; the facings, &c., of dressed stone. A huge and very handsome red brick chimney, probably built temp. Henry VIII., and of which a considerable portion was standing fifty or sixty years ago (see Warren's Sketches of the Ravensbourne), adorned the centre of the north-east side of the building. It is on this side only that any traces of an original door or window are now to be seen : their positions are indicated on the plan. It is also of this side of the building only that the entire length is now to be traced ; part of the south-east side remains, but the form and dimensions of the whole must remain a matter of conjecture, unless excavations be undertaken. It seems, however, rather more probable that the existing walls will be tumbled into the ditches and into the sunken story, with a view to levelling an area for some modern villa, than that any such excavations will be made. At present the place is a scene of perfect ruin and confusion ; it has been inhabited, from time to time, by farmers and others, who have availed themselves of the materials afforded by the old walls, to construct, within the enceinte, buildings more in accordance with their own requirements ; and it has not been without considerable difficulty that even so slight a ground plan as that here given could be made, or that any fragments of dressed stone could be discovered from which an opinion might be formed as to the probable date of the structure.

The history of Simpson's Moat is briefly as follows :—The Manor of Simpson's was, in 1302, the property of John de Banquel, to whom Edward I. in that year granted a charter of free-warren for his lands in Bromley. Thomas Banquel died, seised of the Manor, in 1361 ; and, upon a division of his estates, it passed to his younger son, William. The next owner upon record was William Clarke, who, according to Philipot (p. 84), had a licence from Henry V. to fortify and embattle his mansion here. Lysons states that he could find no reference to this grant in the Calendars of the Tower ; nor has subsequent search availed to verify Philipot's statement, which, however, was probably not made without some authority. About the year 1450, the property came by purchase to John Simpson, from whose family it derived its present name. Nicholas Simpson, who was barber to Henry VIII., and who probably built the great chimney already referred to, aliened the Moat to Alexander Basset, by whom it was subsequently conveyed to Sir Humphrey Styles of Langley Park, near Beckenham.¹ It afterwards passed through the same hands as Langley Park ; and, when Lysons wrote, was the property of Lord Gwedir, whose tenant was, at that time, Samuel Rickards (or Rickets), a farmer. The owner, prior to the estate being sold for building purposes, was Colonel Jackson, who occupied the large house at the southern extremity of the town of Bromley.

Mr. Waller showed numerous rubbings of representations of mail armour upon sepulchral and other memorials, and made comments upon the evidence afforded by those representations and the specimens exhibited by Mr. Bernhard Smith, as regards the construction of that kind

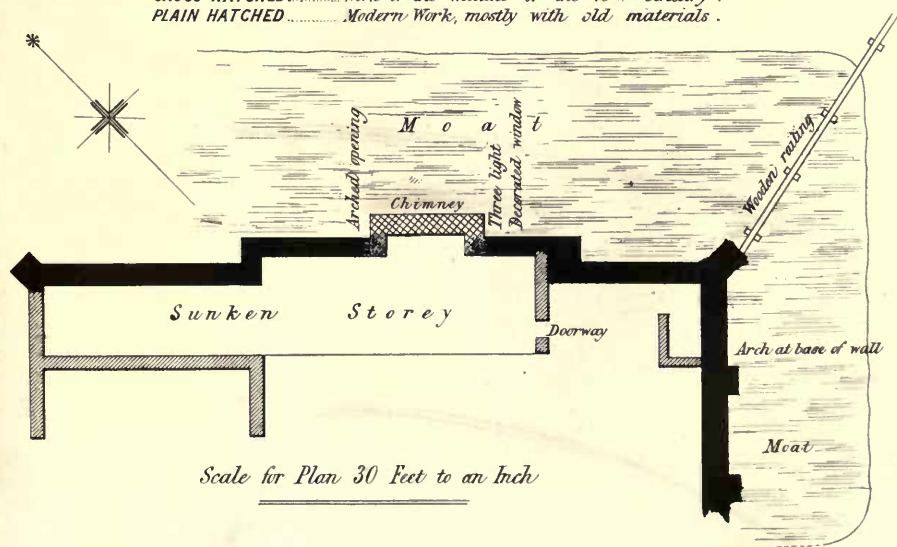
¹ There is a wooden tablet at the east end of the south aisle of Bromley church bearing the arms of Styles. The inscription sets forth that the pews

beneath were appropriated to the sole use of the Styles, ancient owners of Simpson's, and were then (1727) the property of Lady Elwill of Langley.



Simpson's Moat. Bromley, Kent. View from the East.

BLACK Work of the middle of the 14th Century.
 CROSS HATCHED Work of the middle of the 16th Century.
 PLAIN HATCHED Modern Work, mostly with old materials.



Scale for Plan 30 Feet to an Inch

of personal defence. These remarks were in confirmation of the notes supplied by him at the preceding meeting, for which see p. 164, *ante*.

Mr. Hewitt also discussed the subject in some detail. Mr. Bernhard Smith and Dr. Rock also contributed some observations on the subject.

The Very Rev. CANON ROCK drew attention to the remarkable finely woven fabric, for ecclesiastical purposes, which had been lately found at Hesselst Church, Suffolk. It was a corporal or "Corpus Christi" cloth for covering the sacred elements anterior to and during celebration. It was of the most delicate fabric, known as the "*pannus nebulosus*," and was of the fifteenth century. It was a very rare and fine example of such an object.—Also a burse, of the fourteenth century, in which the corporal or Corpus Christi cloth was placed during mass.

Antiquities and Works of Art Exhibited.

By Mr. J. HENDERSON, F.S.A.—Specimens of decorative and inscribed tiles from Spain and eastern countries, comprising—a large square plaque and a narrow, long slab, both of them lusted and inscribed with Arab characters in blue relief. These were brought from an Arab mosque at Natinz, formerly Natanza, 20 leagues from Ispahan, and one attributed to the fourteenth century. The square plaque has been riveted in Persia, having been fractured, and the inscription is only part of a sentence, with the word Victory. The heads of the birds on it, both those in relief and on the flat ornamentation, have been chipped off; and the same injury occurs on a similar but less perfect plaque in the possession of Mons. D'Avillier in Paris. The inscription on the long tile, which is perfect, and formed probably part of a window-frame or of a cornice, as it has a diapered base, is the frequent formula which begins chapters in the Koran,—“In the name of God the Merciful, the Compassionate, oh you (who have believed).” A smaller fragment of the same type of Persian work was dug up by Capt. Burton in Eastern Central Africa, between Zinzebar and Lake Sangouka. The ornamentation is similar, but the birds retain their heads.—Five small tiles, in frames, from the ruined palace of Ferabad near Ispahan, said to have been part of the decoration of a bath-room built by the Schah Abbas II., date, A.H. 1040—A.D. 1662. The figure on horseback, with falcon on his wrist, is said conjecturally to represent him. These tiles were obtained from different shops in Ispahan. The palace was destroyed by the Afghans about 1720.—From the same source is an octagonal lusted tile, with cursive Persian writing not yet deciphered, but assigning to it a somewhat late date.—One of two larger tiles in frames, the deepest in colour, was dug up at Halicarnassus in 1861, and was possibly made at Broussa; the other was from a mosque at Cairo, and is more Persian in character.—A fragment of a tile from the Mosque of the Rock at Jerusalem.—A tile, date about 1300, from the Alhambra, given by Richard Ford (Author of the “Handbook for Spain”) to Mr. Marryat, and purchased at his sale; inscription on it, “There is no conqueror but God.”—A small fragment of later period brought from the Alhambra by Sir William Dundas.

By the Rev. J. BECK.—Bronze fibulæ and other mediæval relics from Gottland, comprising glass beads; a fragment of pierced bronze; fragments of bronze chains; fragments of a comb; also of iron arrow and spear-heads; and a bridle-bit, of Russian work.

By Mr. J. G. WALLER and Mr. J. W. BERNHARD SMITH.—Various specimens of mail armour of the fourteenth century.

By Mr. SHURLOCK, of Chertsey.—Anglo-Saxon cinerary urn found at Walton-on-Thames in November, 1867, with its contents—calcined bones, a small glass bead, and portion of a bronze ornament.—Portions of two large sepulchral Anglo-Saxon urns.—Three imperfect human jaw-bones.—An iron spear-head and a bronze fibula.—Fragments of Roman pottery found in the upper West field, Shepperton-on-Thames, in March, 1868. See *Proc. Soc. Ant.*, Ser. ii., vol. iv., p. 118.

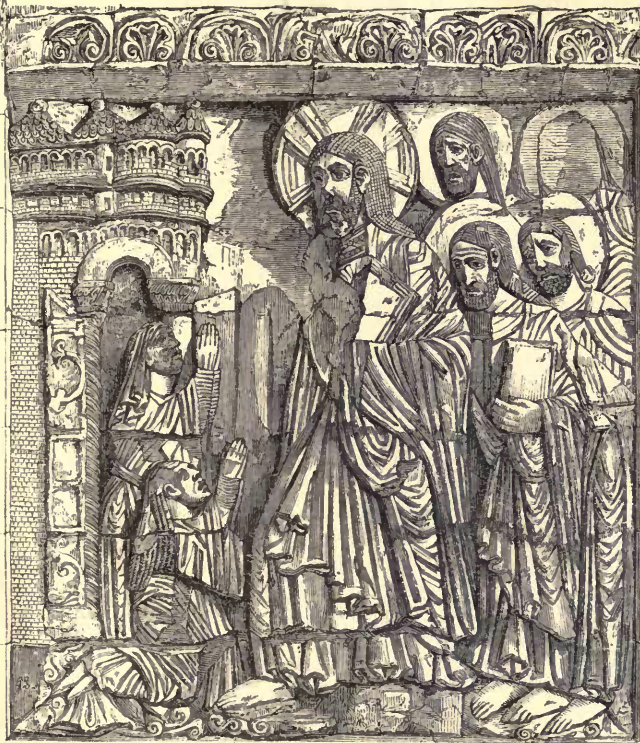
By Mr. G. TATE, F.G.S., of Alnwick.—Drawing of a dagger found in a bog near Charlton, Northumberland. Date, fifteenth century.

By the Very Rev. CANON ROCK.—Corpus Christi cloth and burse found at Hesselst Church, Suffolk.

Archaeological Intelligence.

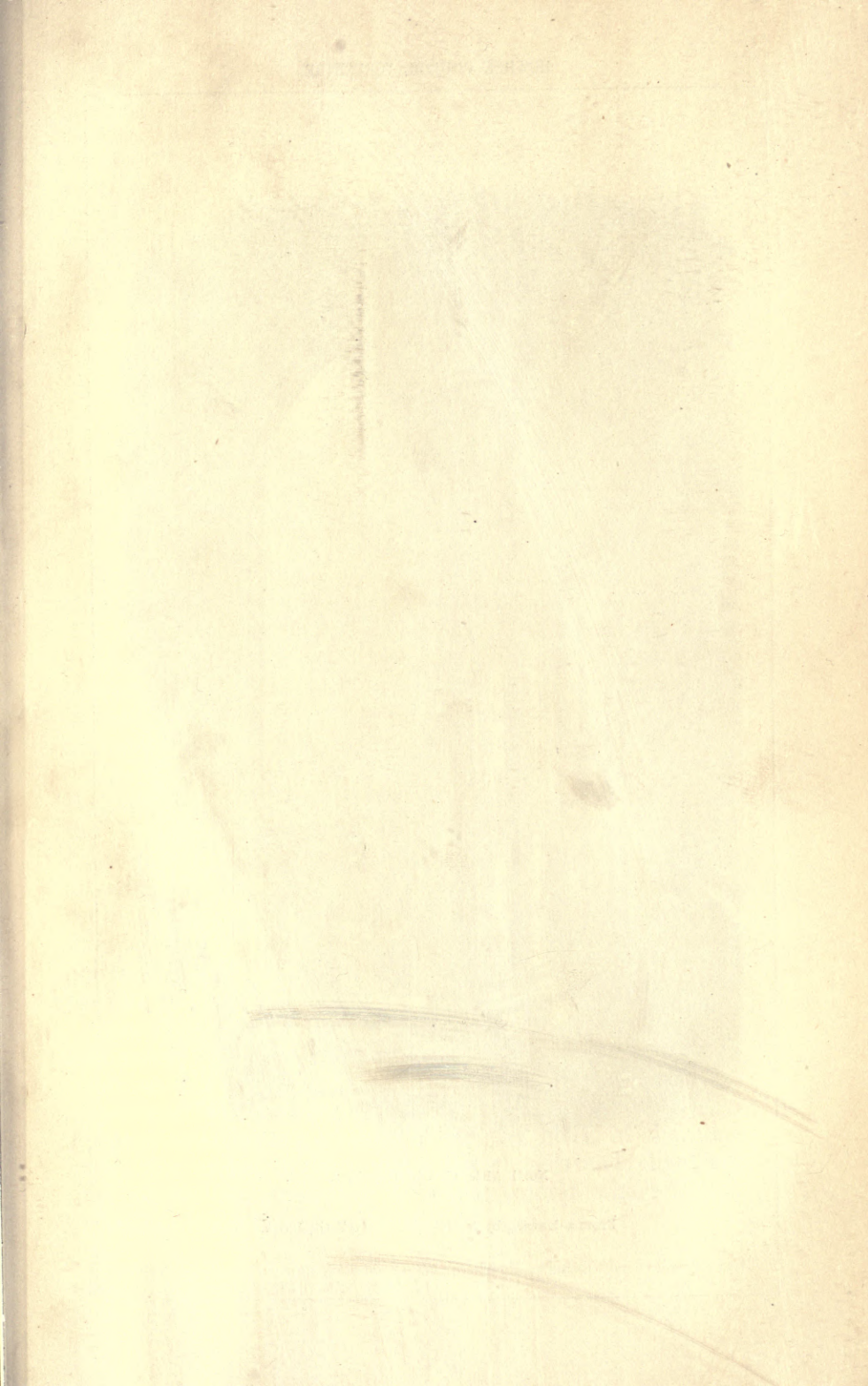
THE important work, of which we formerly made mention as in immediate preparation, by Mr. J. B. Waring, Chief Commissioner of the Leeds Exhibition, and well known by other undertakings in connection with the history of mediæval arts and manners, is announced for publication as soon as the cost may have been guaranteed by a sufficient number of Subscribers. It is entitled—*The Stone Monuments, Tumuli, and Ornaments of Remote Ages; with Notes on Early Irish Architecture*. The volume (price to Subscribers three guineas) will consist of about a hundred and ten plates, containing more than five hundred subjects. Not less than seventy plates are devoted to megalithic and pre-historic remains; the remainder will illustrate ornamental art in bronze and the precious metals, ending about the eighth century. More full particulars may be obtained from the Author, 2, Liddington Place, Amptill Square, N.W.; to whom also names of Subscribers may be addressed.

An announcement of the recent formation of "The Provincial Record Association" cannot fail to be welcome to many of our readers. It is constituted for the examination of Parochial or other Registers, and to devise measures for the greater security and preservation of these records, which contain valuable information illustrative of national as well as local history, especially in reference to the descent of families. They have, however, owing to the want of any organisation for the purpose, never been systematically examined. The Association proposes to employ competent persons to make examinations of such registers, to calendar their contents, and to print such calendars for the use of the Members. It is also proposed to print certain historical materials, such as letters in the Cottonian and other collections. Provincial registers of wills present another important object to which attention will be given. The annual contribution of members is fixed at half-a-guinea. Further information will be given by the Secretary, L. C. Alexander, Esq., 2, Paul's Alley, Paternoster Row, to those persons who may desire to encourage such an undertaking.



Sculpture in the South Aisle of the Choir, Chichester Cathedral.

Our Lord, with Martha and Mary, at the Gate of Bethany. John xi.



HOWDEN CHURCH, YORKSHIRE.



North Aisle, view looking East.

From a drawing by the late Rev. J. L. Petit, F.S.A.

The Archaeological Journal.

JUNE, 1868.

HOWDEN CHURCH.¹

By the late REV. JOHN LOUIS PETIT, M.A., F.S.A.

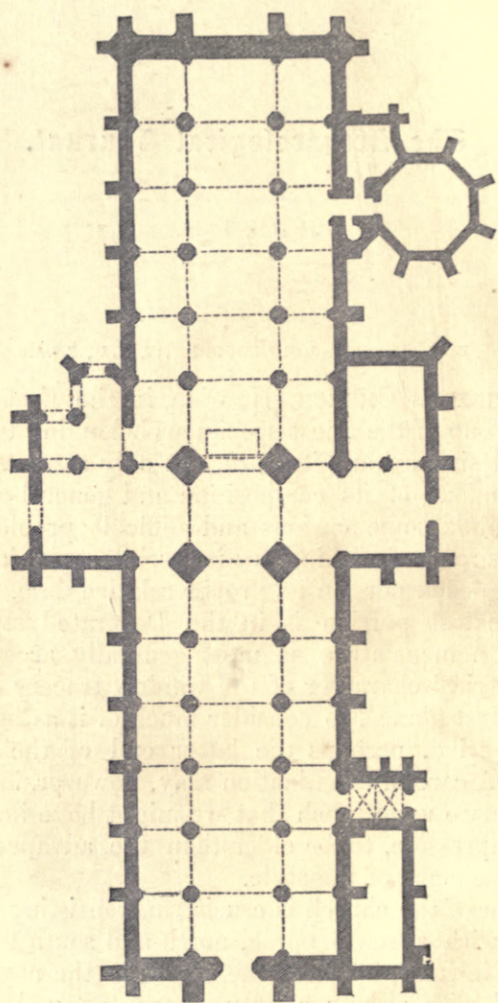
ST. CUTHBERT'S CHURCH, Howden, in the East Riding of Yorkshire, one of the finest specimens belonging to a district rich in ecclesiastical architecture, not only attracts attention by the grandeur of its composition and general outline, but offers, I think, some curious and difficult problems to the student desirous of making out its architectural history, and assigning to each portion its proper relative date.

The greatest portion is in the Decorated style (I use Rickman's nomenclature as most generally accepted), and the Geometrical character of the window tracery might lead us, at the first glance, to consider much of it as belonging to an early period, perhaps the latter end of the thirteenth century. A careful examination may, however, incline us to fix a later date upon much that we might have imagined, on our first impression, to be older than the advanced, or even the late specimens of the style.

The plan of the church is cruciform, consisting of a nave and aisles with a south porch, north and south transepts, a choir, now in ruins, of the same length as the nave, and like it provided with aisles; a lofty central tower chiefly of the Perpendicular style; a beautiful chapter house of the same style, but earlier in date, and a few chapels and chantries. The dimensions, according to measurements which I took somewhat roughly, are as follows:—

¹ Communicated to the Architectural Section at the Meeting of the Archaeological Institute, Kingston-upon-Hull, July, 1867.

HOWDEN CHURCH, YORKSHIRE.



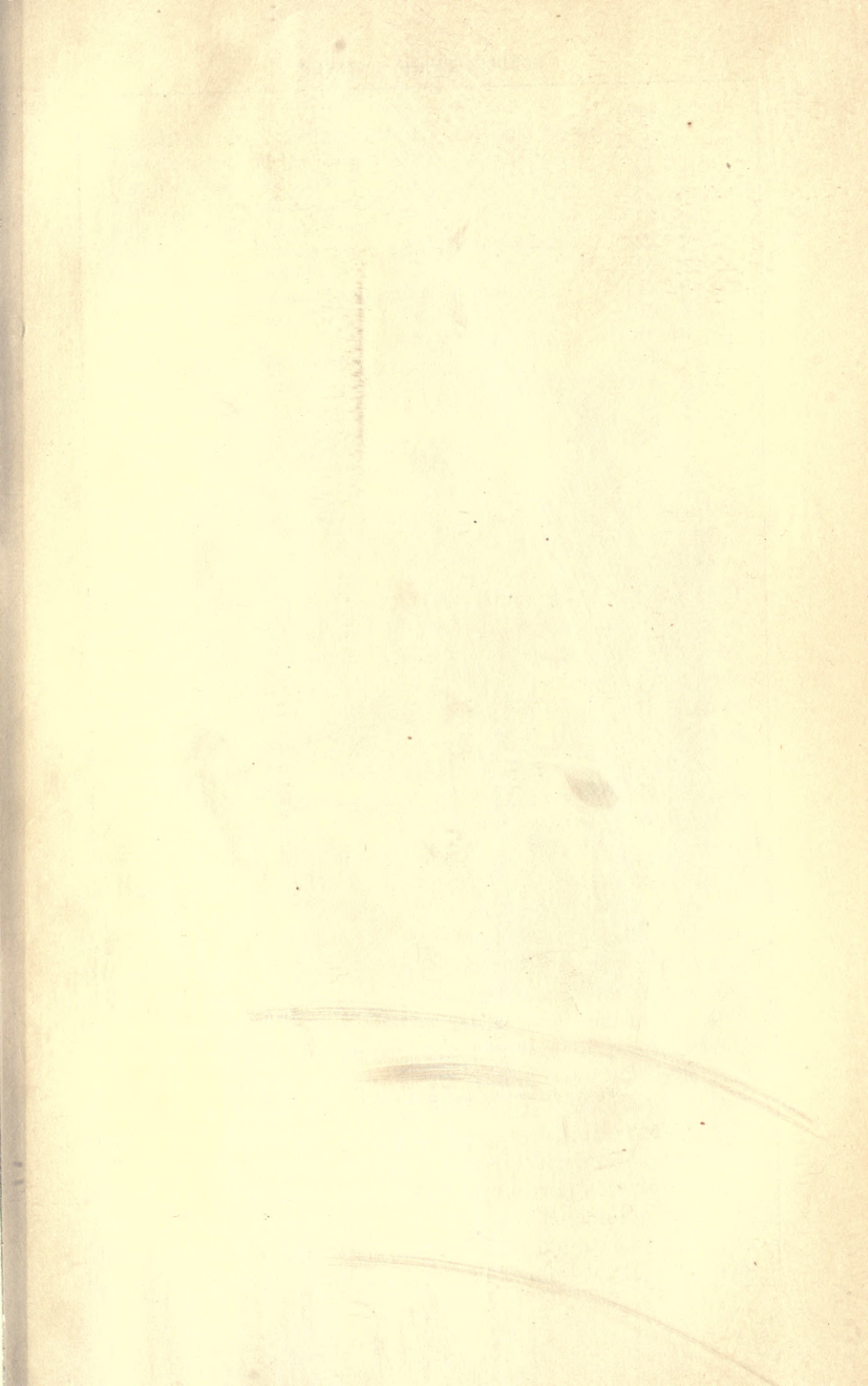
Ground-plan.

HOWDEN CHURCH, YORKSHIRE.



West end.

From a drawing by the late Rev. J. L. Petit, F.S.A.



HOWDEN CHURCH, YORKSHIRE.



Pinnacles on the West front.

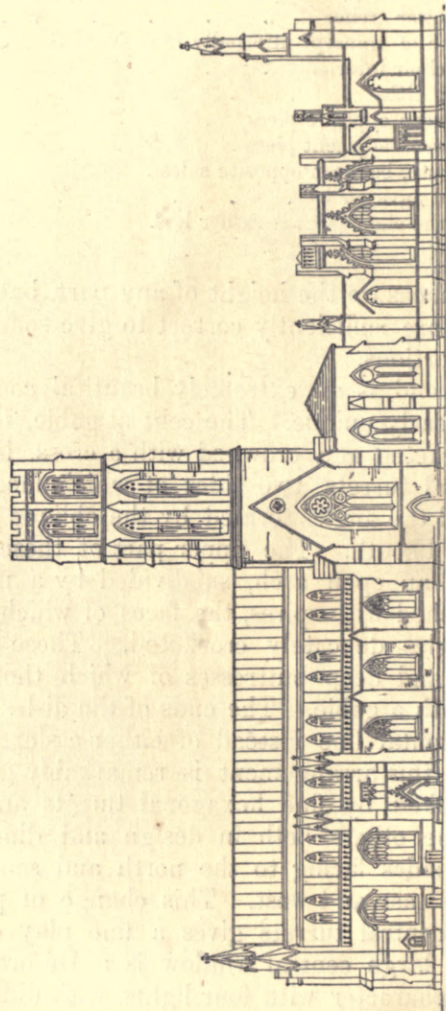
From a drawing by the late Rev. J. L. Petit, F.S.A.

	feet.	in.
Length of nave internally from the west wall to the western piers of the central tower	107	9
Width of the whole nave	58	4
Width between opposite piers	24	8
Width of inter-columniations	15	1
Width of area of intersection including tower piers	39	7
Width of tower arches	15	5
Total length of transept internally from N. to S.	112	6
Length of choir internally	109	5
Total width ditto	58	10
Width between opposite piers	24	7
Width between adjacent piers	17	2
Chapter house, between opposite sides	25	0
Diameter of nave piers	3	1
That of the choir piers is rather less.		

I did not measure the height of any part, but I hope that my sketches are sufficiently correct to give some idea of the general proportions.

The west end is an extremely beautiful composition ; I should say nearly unique. The central gable, the coping of which is crocketed and crowned with a cross, is flanked by two hexagonal turrets, two sides of which face to the west and east, and the angles formed by the oblique sides face to the north and south. The upper part of these turrets has in each face an open arch, subdivided by a mullion ; and they are finished with spires, the faces of which are pierced, and the angles delicately crocketed. These turrets rest upon broad and deep buttresses of which the upper stage is finished with a gable. The ends of the aisles are finished with a horizontal line instead of either a slope or a gable ; the effect of this arrangement is remarkably good. These are also flanked by fine hexagonal turrets and pinnacles, similar to the others both in design and dimensions, but having their sides facing to the north and south, and their angles to the east and west. This change of position from that of the central turrets gives a fine play of light and shade. The large central window is a Decorated one of a geometrical character with four lights, with different orders of tracery, the central mullion being thicker and deeper than the others. The head consists of a quadrangular figure with sides curving outwardly ; two of them coinciding with the arch of the soffit, and the other two forming an inverted arch beneath. In this figure is a large quatrefoil having a subor-

HOWDEN CHURCH, YORKSHIRE.



South Elevation.

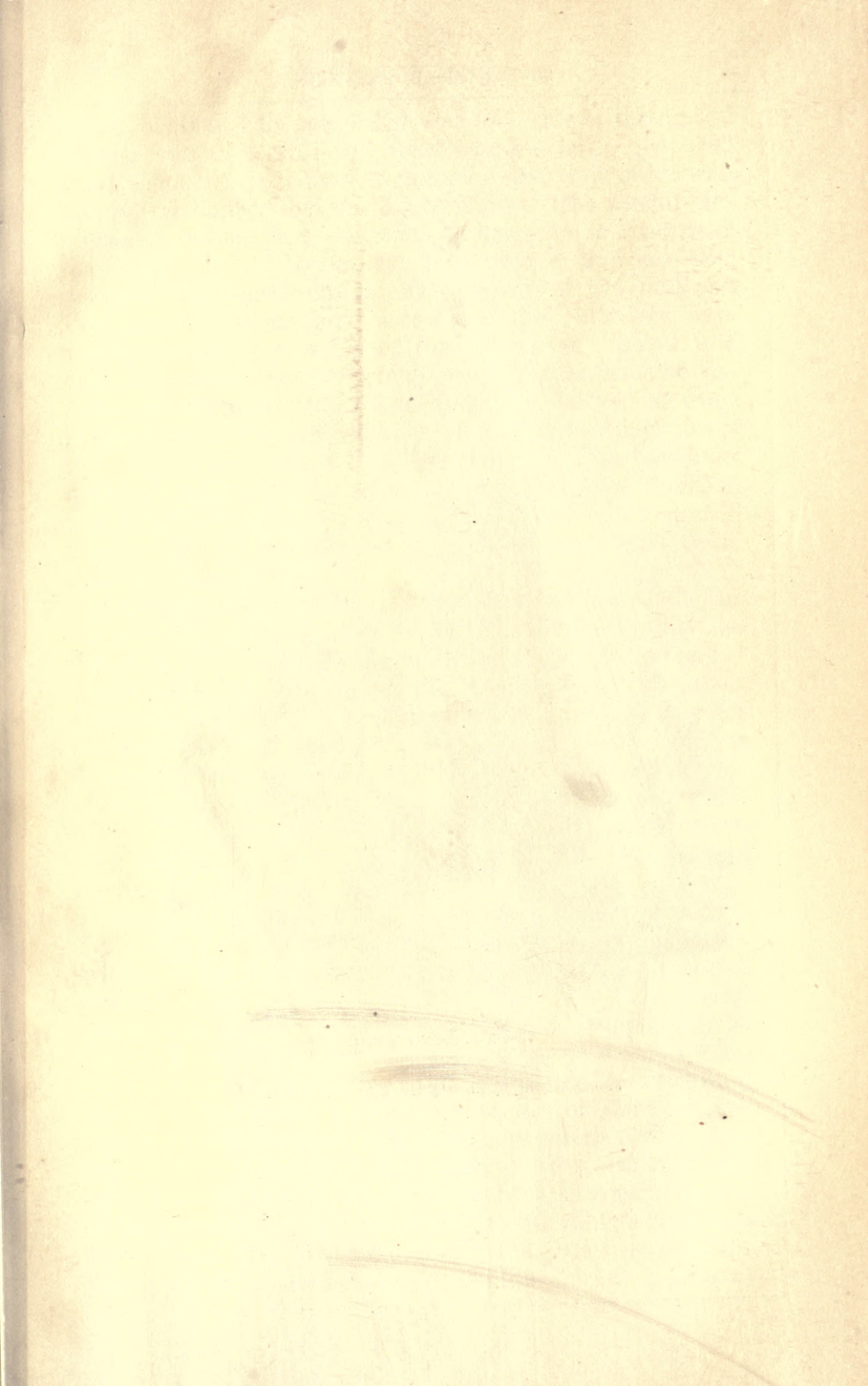
HOWDEN CHURCH, YORKSHIRE.



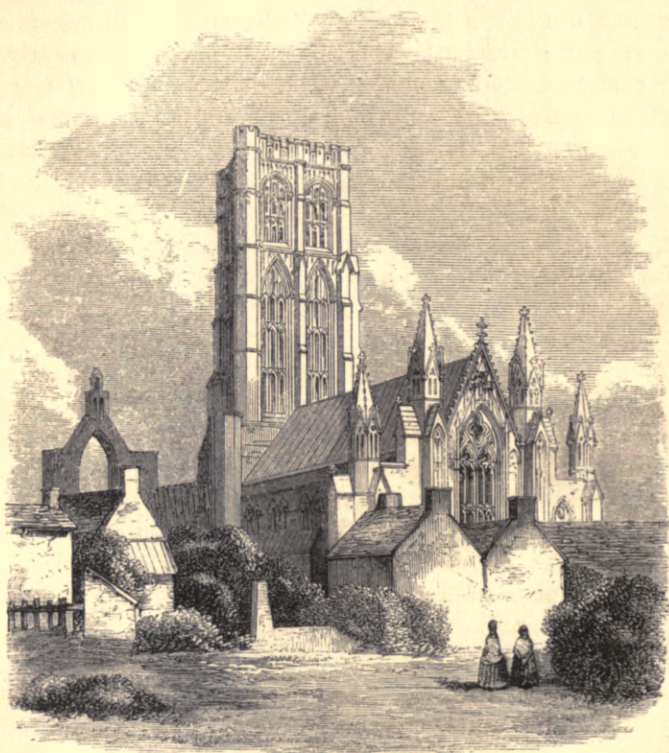
One of the Pinnacles on the South side of the Choir.

From a drawing by the late Rev. J. L. Petit, F.S.A.





HOWDEN CHURCH, YORKSHIRE.



View from the North-West.

From a drawing by the late Rev. J. L. Petit, F.S.A.

dinate foliation. The pair of lights on each side of the central mullion is finished with two trefoils and a large quatrefoil above them, comprised within arches of the same order with the central mullion and the figure above. The window has a transom, which, from its want of harmony in scale with the design above, I think must have been a later insertion, probably introduced during some repair of the mullions. The spaces between this window and the buttresses have delicate panelling of a Geometrical character. Below is a door of several orders of mouldings. The lateness of character we shall have to consider presently, as well as some peculiarities in the west windows of the aisles, which are of three lights and have a circle in the head. The buttresses flanking the central compartment have good figures in niches. The spires of the turrets were probably all crowned with statues; one, a winged figure, still remains. It is remarkably light and elegant.

Attached to the south side is a very late Perpendicular building now used as a school, and I believe originally designed as one. Though this addition is no improvement, I should not say it much injures the general effect of the front. I most sincerely hope that this beautiful composition may not be restored, in the usual sense of the term. Some repair is doubtless necessary; but it should be no more than what is requisite to ensure safety, and prevent as much as possible the further decay of delicate work. I should much deprecate any attempt to replace what has already been effaced by the action of time.

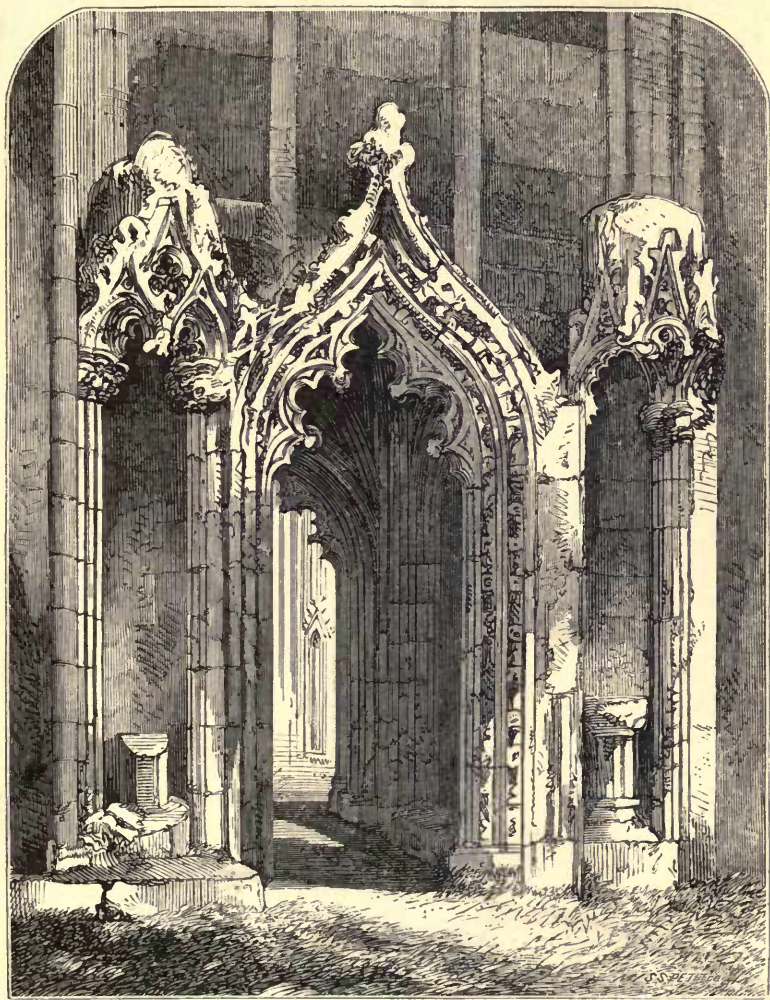
The late Gothic school-house, which I have noticed, extends on the south side from the west end to the porch, which is now used as the vestry, but ought to be opened and restored to its original condition. This is a very perfect specimen of the Decorated style, and a head, supposed to be that of Edward II., over the door, suggests a date corresponding to some part of his reign, or early in the fourteenth century. The porch, which has a parvise or chamber over it, is beautifully vaulted, and externally enriched with plain and massive pinnacles. The aisle windows, between this porch and the transept, have a Geometrical character, as well as the clerestory, which consists of a pair of two-light windows in each bay. The transepts are the earliest parts of the church, showing decided Early English work; their front

windows are pure Geometrical ones of four lights, but with transoms, probably inserted. The other windows of the transepts have each two lights with a circle in the head. They are of very beautiful proportions, and would take place among the earliest specimens of bar tracery. The pier-arches and clerestory of the choir have wholly disappeared, the outer walls of the aisles and the east front alone remaining. The aisle windows, however, are in part preserved and are of a purely Decorated character, though not without traces of the Geometrical. The elevation of the east end is also perfect, with the exception of the window tracery. Mr. E. Sharpe, in his *Architectural Parallels*, has given the east window restored, apparently with great correctness. It had a large circle in the head, with radiating lights, and much flowing tracery. This front differs from the west front in having the hexagonal turrets which flank each of its compartments set one way, namely, with faces to the east and west, and angles to the north and south. The buttresses have niches of delicate work, from most of which the figures have disappeared; some of them having been removed to the rood screen. Some of the aisle buttresses still retain their extremely beautiful pinnacles. No doubt there were flying buttresses to support the roof of the central aisle. I do not suppose that the nave ever was vaulted.

The chapter-house is Perpendicular, so early as to have something of a Decorated character; in style it is not unlike Nantwich church in Cheshire. It is an octagon, with deep buttresses much enriched and terminating in pinnacles. The windows are of three lights, with somewhat intricate Perpendicular tracery, and ogee crocketed canopies. The interior is panelled with arches which are filled with quatre-foils. No part of the vaulted roof remains. It probably fell in 1750, as that is the date given for the fall of the spire which covered it. The vaulting of the choir is said to have fallen in 1696.

The tower, up to a string just below the ridge of the nave roof, and somewhat higher than that of the transept, is apparently of the same date with the piers and arches below, namely that which corresponds with the Decorated style. It presents no architectural features, except a small shaft at each angle externally. The interior is quite plain, and it probably never was intended to form an open lantern, which,

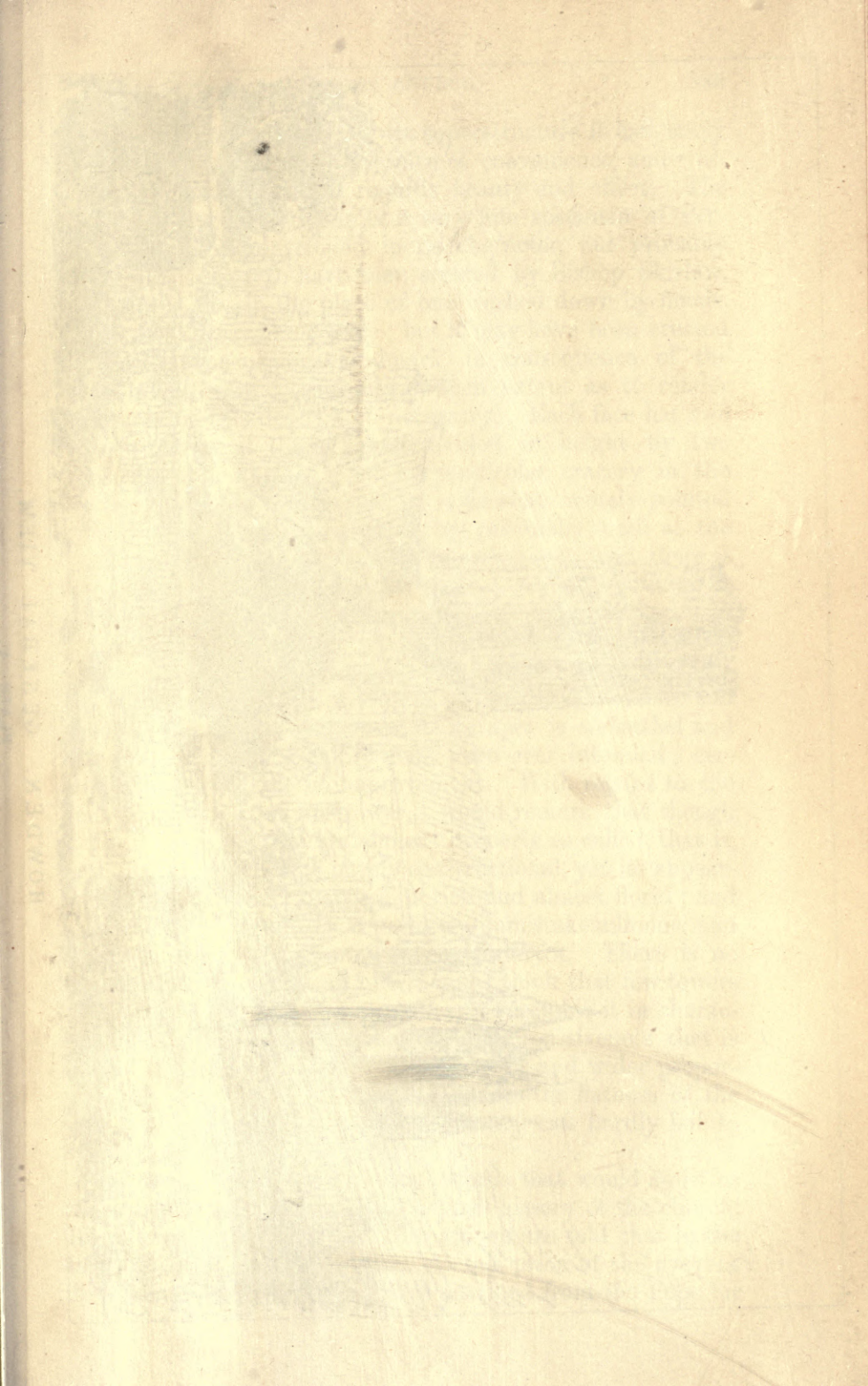
HOWDEN CHURCH, YORKSHIRE.

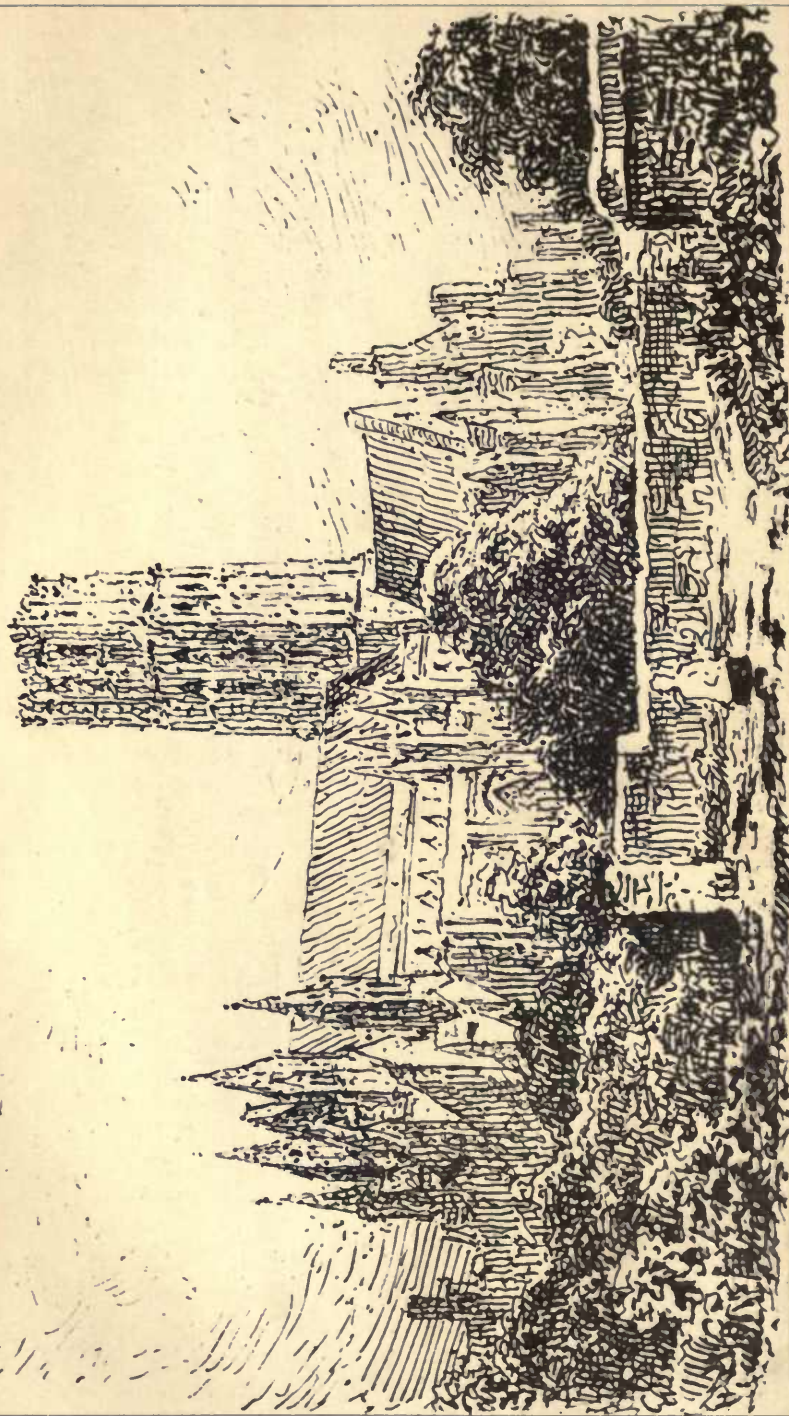


Entrance from the Choir to the Chapter-house.

From a drawing by Miss Petit.







HOWDEN, GENERAL VIEW.
PLATE 4.

together with a great part of its superstructure it has lately been made to do, at much sacrifice of convenience, and with very inadequate results as regards beauty and effect. The next stage or compartment is a very fine specimen of Perpendicular ; fully developed in its character, but probably early. It is said to have been erected by Bishop Skirlaw, about 1390 A.D., in the place of one washed down by floods. This is not a very likely story ; but it may have been erected as a more conspicuous landmark, in consequence of the floods, which were occasionally of such extent as to render structures of this description necessary. Each face has two lofty windows of three lights, divided in height by two transoms, and having good Perpendicular tracery in the heads, which are comprised in somewhat acutely-pointed arches. There are buttresses, facing cardinally, both at the angles of the tower and between the windows ; and there is a stair-turret at the north-west angle. Above this stage is another of decidedly later character, belonging evidently to the very end of the style. Its windows correspond in width and position with those below, and like them are of three lights, but are divided in height by only one transom, and have very depressed arches. The parapet is embattled and has no pinnacles. Possibly none were ever intended ; certainly they would be no improvement. With regard to the general effect of this fine tower, I would remark, that though it has no architectural enrichment properly so called, that is, nothing beyond what is purely constructional, yet its appearance, even at a short distance, is rich and almost florid ; and again, that its outline is a perfectly unmistakeable one, and therefore peculiarly adapted for a landmark. There is no tower in the district at all like it, and I think that few towers in England will be found that nearly resemble it in character. Though very lofty, it has an air of massiveness that is hardly attained by many towers of lower and wider proportions ; perhaps this may be attributed to the flatness of the summit ; be it as it may, this peculiarity can hardly fail to strike the spectator.

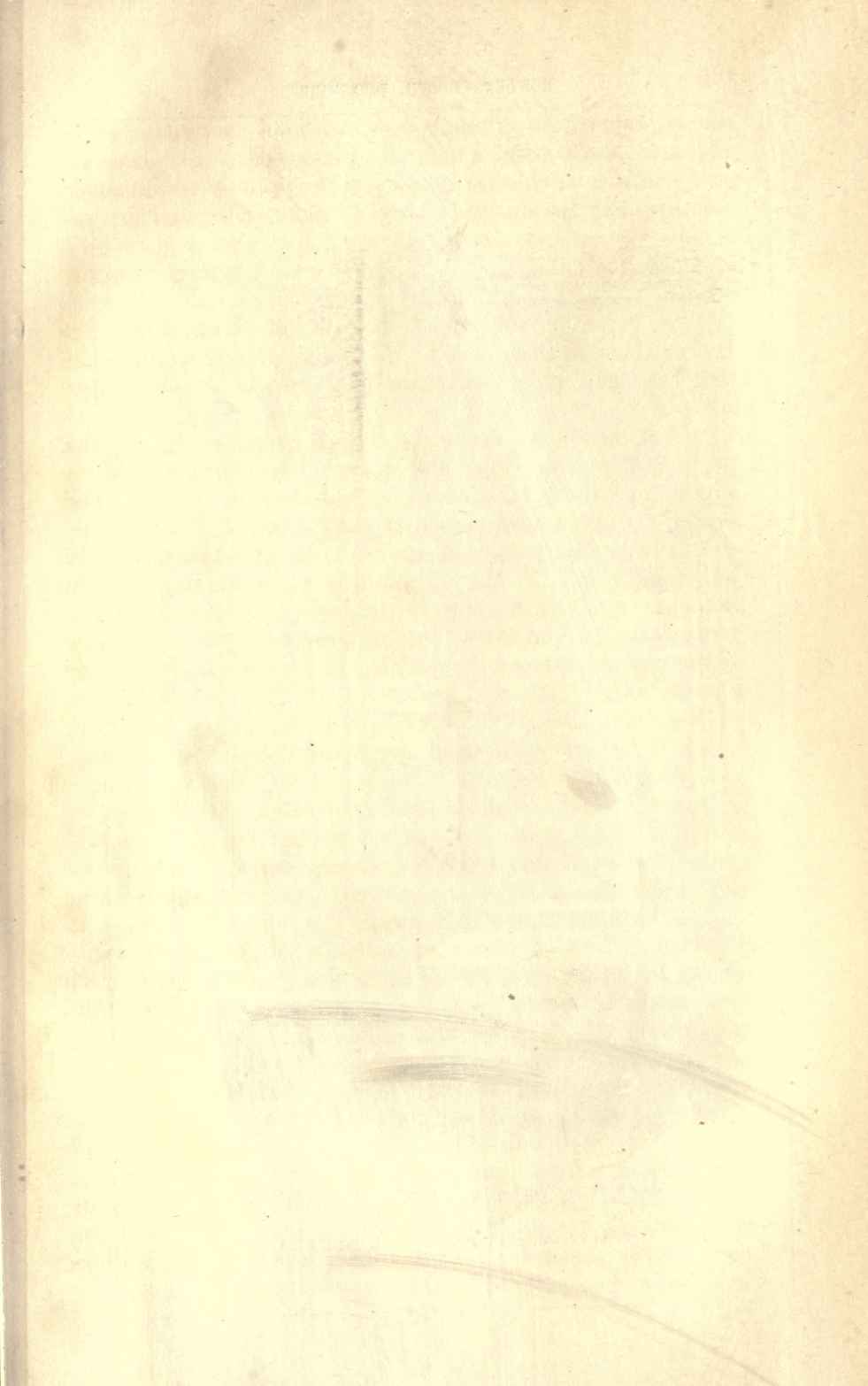
I am not acquainted with any records that would assist us much in determining the architectural history of the church. In Hutchinson's History of Durham we are told that in the time of Hugh de Derlyngton, elected prior of the convent of Durham in 1258, "a bull was obtained from the Pope for

the appropriation of Hoveden [Howden] church for an addition of 16 monks, but at a considerable expense he procured the appointment to be converted into prebends, apprehending they would prove as honourable and advantageous promotions, and as acceptable to the clergy whom he wished to serve, as if the original institutions were maintained."

"The prior and convent of Durham had a large jurisdiction in Howden and Howdenshire, and over the church of Howden and other churches and chapels within that liberty."

"The church at first was a rectory parochial, of the patronage of the prior and convent of Durham, and in March, 11 Henry III., Walter, Archbishop of York, by the assent of Fulk Basset, parson of the church of Howden, and of the priory and convent of Durham, granted to Walter Kirkham, clerk, all the tithes of corn pertaining to the chapel of Estrington, by name of a single benefice, without cure of souls or episcopal burdens, rendering thence yearly to the parson of Hoveden and his successors (3 bezants) as a pension on Martinmas-day."

"6th March, 1267. Forasmuch as the parish church of Hoveden was very wide and large, and the profits and rents so much abounding as to be sufficient for the maintenance of many spiritual men, therefore Walter, Archbishop of York (at the instance and petition of his chapter of York), that there might be prebends ordained out of the revenues of the church, and by their concurrent authority and consent, and likewise of the submission of the prior and convent of Durham, to him, of whose patronage it was, made this ordination, viz., that there should be in this church of Hoveden, five prebends for ever, and each of them to maintain at his own proper costs a priest and clerk in holy orders to administer in the same, in a canonical habit, according to the custom of the church at York, and to observe the like way of singing as those of York church, (excepting in matins which they shall say in the morning for the parish,) and one of them who is most fit shall be rector of the quire and ordain things belonging to divine service, and each of them as an ebdomodary shall orderly keep his turn, and serve the cure of the parish by his respective priest in the portion assigned to him."



HOWDEN CHURCH, YORKSHIRE.



View from the Choir looking Eastward into the South Aisle.

From a drawing by the late Rev. J. L. Petit, F.S.A.

“The area or churchyard should be proportionably divided to the prebendaries for their habitations, and the value of the buildings then erected should be converted to the fabric of the quire.” Hist. Durham, vol. III. pp. 450, 451.

These extracts from Hutchinson's History of Durham show that the church was a large and important structure in the middle of the thirteenth century, and also point out changes in the ecclesiastical constitution very likely to lead to considerable alterations in the fabric itself. The supposition that these were made soon after the year 1267, when the church was made collegiate, is not contradicted by its architectural style and character. There do not appear to be any Norman remains of the church *in situ*; a few fragments are used in the masonry of some of the adjacent buildings, but I do not remember noticing any in the work of the church itself. The south transept door is clearly of the Early English style, and not of a very advanced stage, nor is the workmanship at all elaborate. The north door has less decidedly marked features, but is probably much of the same date. In the walls of both transepts is some rough masonry; this I conceive to have belonged to the church prior to its being made collegiate.

We have some indications of the form of the church previous to the erection of the magnificent choir now in ruins. The eastern face of the tower pier, as shown in the cut, exhibits, below the capital from which sprang the westernmost choir arch, another capital, lower than those of the arch opening from the transept into the choir aisle. Now there can be little doubt that this low capital belonged to an arch opening from a choir or chancel, which was itself without aisles, into an aisle or chapel attached to the eastern side of the transept, and covered with a roof sloping down from the wall of the same transept; an arrangement by no means uncommon, and which may have been adopted in a structure even earlier than the Early English parts of the edifice.

It is most likely that the original church had, or was intended to have, a central tower, but it may be questioned whether any part of the original piers remain *in situ*. The section of the present piers exhibits in places a certain flowing line, or curve with contrary flexure, which, though it

may be occasionally found in early work, is more characteristic of an advanced Decorated or curvilinear style. And the mouldings of the tower-arches are wholly different from all the other arch-mouldings in the church; consisting of simple concave chamfers, without the combination of torus and hollow which is elsewhere used with so much variety and profusion.

But perhaps the strongest evidence may be found in certain constructional accidents. The tower piers and arches are themselves perfectly firm, true, and solid, with no crack or indication of settlement, though they are made to bear a much greater weight than was originally intended, and though the bed in which the foundation is laid, if I am rightly informed, is by no means of a firm and solid character. But every one of the arches which abut against their piers has been forced from its proper shape, and has a decided break near the crown, evidently in consequence of weight or pressure from the piers and arches of the intersection. Whether they have suffered from the pressure of an earlier tower of the same date with themselves, or from the present structure before its completion and consolidation, it would not be easy to determine without further data, and I am not aware how such can be obtained. So far, the order of date appears to be, first, the transepts with their eastern arcades and western arches opening into the nave aisles; next, the arcades of the nave; next, the tower piers and arches, and the lower stage of the tower itself. I ought to have remarked that all the bases are Decorated; I do not recollect noticing an instance of the Early English water-moulding in any part of the interior, though at Hull it occurs in work of a much later character. Above the western arch of the tower is the mark of a weather-moulding, which corresponds with what would be the roof of a nave having no clerestory above the arcade; and the roof might have been continued over the aisles with the same slope, or at a small inclination. The walls of the aisles may have been in the same position as the present, but somewhat lower. We have thus arrived at the general plan and composition of a fine and large parish church, such as may have existed at the latter part of the thirteenth century, and it may have comprised some work subsequent to the endowment of the collegiate establishment, though prior to those portions of the building

which more decidedly mark its collegiate character. At this stage the church consists of a nave with aisles, but no clerestory, a low, plain, central tower, transepts with eastern aisles or chapels, and a chancel without aisles.

But after the church became collegiate, it was probably thought that an edifice of greater dignity and size would be more appropriate, and the first important step would naturally be the erection of a new and larger and more magnificent choir.

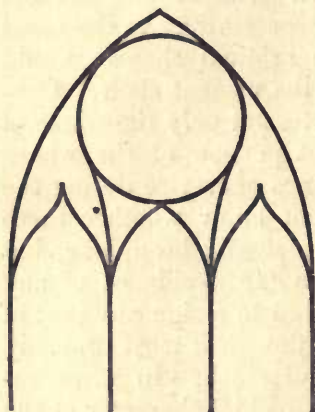
I would first notice that the design of this choir is such, that a very large portion of the fabric might be built and completed without touching or interfering with the services of the then existing chancel. Indeed, all that now remains of this fine structure, with the exception of the bases of piers and the like, might have been formed round the old chancel without touching its walls; as, according to the usual proportions of such buildings, the original chancel would hardly exceed in length one half of the present choir. Consequently it was possible to complete, not only the whole of the outer wall, but also a sufficient portion of the whole, near the east end, for the continuance of service during the demolition of the chancel. I do not know whether there are any indications of this having actually been done, but it clearly might have been done, to the avoidance of any interruption. I should not be disposed to assign any part of the choir to the thirteenth century, though it most probably belongs to the beginning of the fourteenth. In some respects it has quite as much of the parochial character of the nave, namely, in the slightness of the piers and the width of the arches.

The magnificence of the new choir when complete would suggest certain additions to the nave, which might contribute to the unity and harmony of the whole structure. The principal of these is a new clerestory, by which the roof of the nave is made to correspond in height with that of the choir. The design of this is remarkably elegant. Although it must of necessity be late in the style, that is, if it was built after the choir, it still preserves so much of the Geometrical character as to keep it in perfect harmony with the oldest part of the church. In construction it is very light, being never intended or calculated to bear a vault. As the beautiful west front, which has already been described as to

its general features, is adapted to a nave with a clerestory, it necessarily bears a corresponding date, and is therefore, if our suppositions have hitherto been correct, later than the east front, though a hasty glance might induce us to think otherwise. But the jambs of the western door, in their shafts, bases, and mouldings in general, bear decided indications of a very advanced style, having, in fact, more in common with Perpendicular than Early English work.

We have noticed the south porch as having been assigned to Edward II.'s reign. Its pinnacles bear much resemblance to some at Selby of the Decorated period.

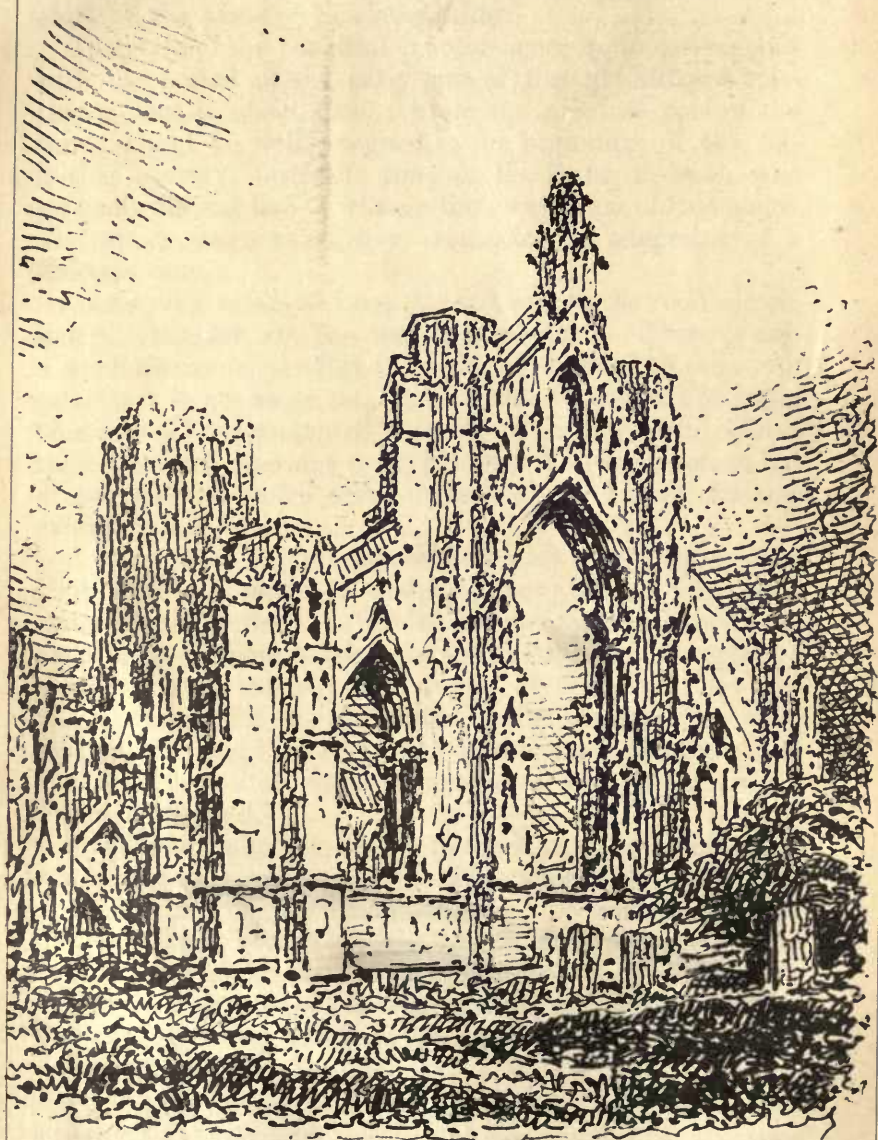
If the nave aisles have been increased in height, the windows must be of the date of the later work of which we have spoken, but they still preserve the same geometrical character which pervades the whole fabric. We must not omit to notice the west windows of the aisles, which though they exhibit the circle in the head, have in connection with it a flowing line, which is quite inconsistent with the purity of geometrical tracery, and is no improvement to the composition. It is, however, a feature of too small importance to catch the eye, and consequently cannot be said to detract from the beauty of the front. This window is copied in the modern east win-



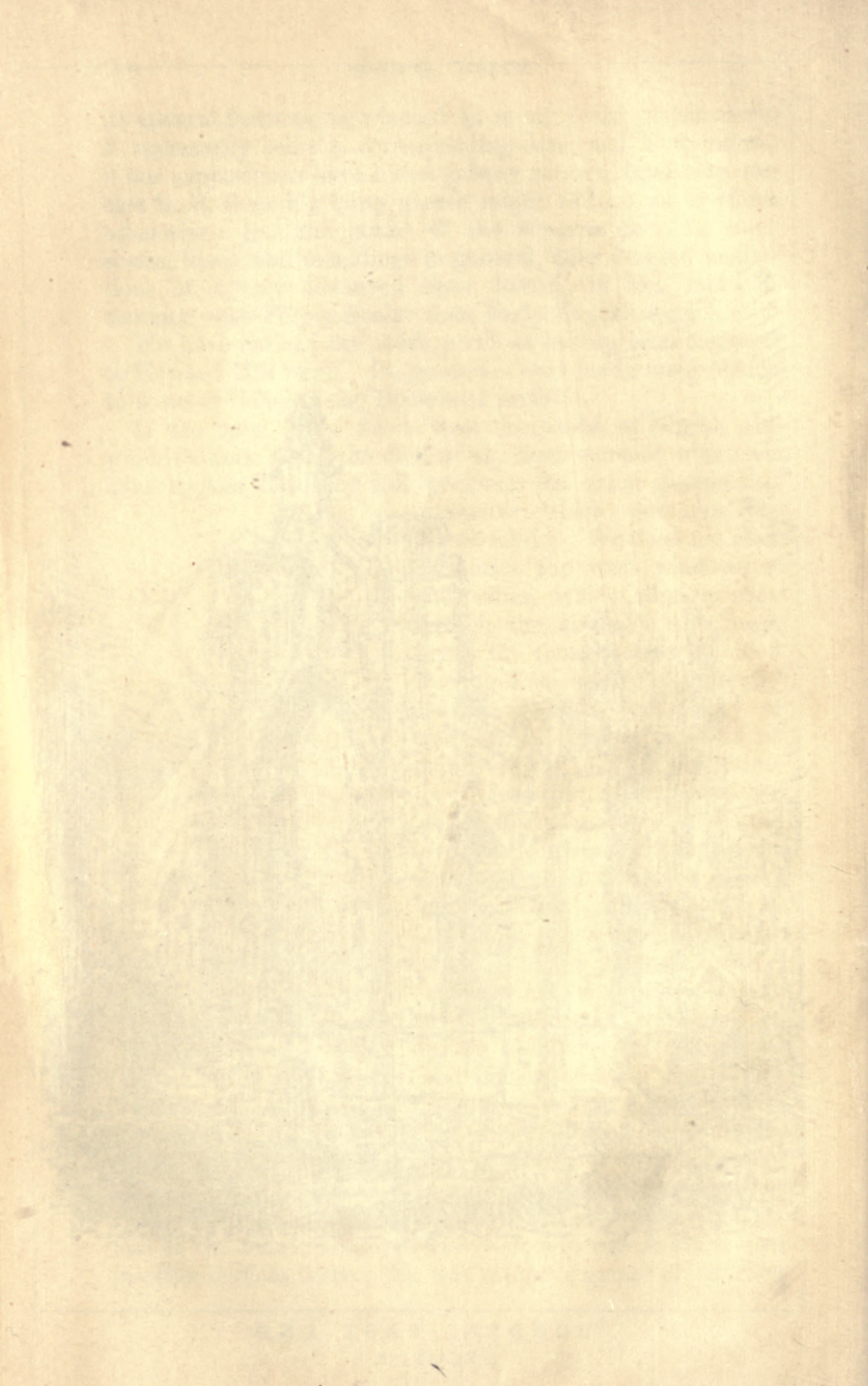
Tracery of the West windows of the aisles.

dow inserted in the blocked up arch of the tower.

Bishop Skirlaw's works at Howden are mentioned in Hutchinson's History of Durham. He was translated to that see, April 3, 1388, having been successively Bishop of Lichfield and Coventry, and Bishop of Bath and Wells. "He made," it is said, "a strong tower to the church of Howden for the safety of the inhabitants on any inundation, and expended great sums of money in the repairs of that church, whereto he added the chapter-house, which is spoken of at the time as a beautiful edifice; he erected the hall of the manor-house of Hoveden, and was at much cost in other edifices there. He was at the expense of building



HOWDEN, EAST END.



a great part of the tower of York Minster, vulgarly called the lanthorn, where his arms are now to be seen." "He departed this life on the 24th of March, 1405 ; and was interred in a magnificent tomb, opposite to that of Bishop Hatfield, before the altar of St. Blase, which afterwards obtained the name of Skirlaw's Altar."

The style of the beautiful chapter-house quite corresponds with the period of the early part of Bishop Skirlaw's episcopate, that is, about 1390 ; while the greatest part of the tower might be well assigned to the beginning of the following century, near the time of the Bishop's death, who probably did not live to witness the completion of that stage. The upper stage, as we have remarked, is altogether of a different date.

The figures removed from the east end to the rood screen, now the reredos, are fine and well executed. There is also a good monumental effigy in a chapel annexed to the south transept ; in the same transept is a kind of pedestal or stand which may have supported a figure, or it may have been a table on which offerings were placed. The rood screen has a compartment roofed with a depressed barrel vault of stone, evidently of a late date.

I must again express my earnest wish that this beautiful church be not made to undergo the process of so-called restoration. Perhaps a careful survey might be expedient ; and here and there it might be found necessary to replace a stone or two ; but any substitution of new work, however well executed, for the old, would go far towards destroying all the value and interest of one of the finest illustrations of the most beautiful phase of mediæval architecture which exists in England.

I have to offer my thanks to the Rev. William Hutchinson, Vicar of Howden, for the assistance and facilities he has given me in the examination of the church ; to Mr. William Small, bookseller, who has directed my attention to several interesting details, and of whose dates, apparently given with correctness, I have availed myself ; and to Thomas Clarke, Esq., from whose notice of the church I have also derived assistance.

The illustrations of the foregoing memoir, prepared from the beautiful drawings by the lamented author, have been presented, in accordance with his most liberal intentions, by the kindness of his Sisters and Executors.

MEDIÆVAL ART AND THE FAIRFORD WINDOWS.

By MR. J. G. WALLER.

IN the controversy upon the attribution of the Fairford windows to the hand of Albert Durer, Mr. Holt confidently appealed to certain conventions, as the especial property of the artist ; and not content, even here, he put down several subjects, the selection of which were assigned to him. An argument so strange could not fail to be speedily met, and his facts were, one by one, easily disposed of. But it occurred to me, that it was necessary to show that, in principle, Mr. Holt's views were fallacious, and inconsistent with the spirit which guided the art of the Middle Ages. Hence the present paper, which is intended by a few illustrations to prove that the governance of art was so catholic, that in different parts of Christendom, widely separated from each other, not only were the same subjects being treated at the same time, but even in the same way. And this was not confined to the Latin Church, but existed also in the Greek Church, notwithstanding the schism between them, and in the latter, mediæval traditions are preserved to this very day. A singular confirmation of this I received only a few months since, in looking over some photographs from Abyssinia. Among them were some from paintings in their churches, as rudely executed as those efforts of nascent genius we occasionally see chalked upon our walls ; yet through this rude work the subject was indicated by the ecclesiastical convention, though the photographers were evidently puzzled and had erroneously attributed them.

But before I enter into my general subject, I shall allude to two of the conventions which Mr. Holt relied on, viz., the nimbus and the circular aureole or glory about the figure of our Lord in Judgment. As regards the first, to the illustrations already given by others, as identical with that at Fairford, I add two ; one from painted glass at West

Wickham, Kent, date about 1480—90; another from a brass at Childrey, Berks, of a similar date. As for the second, the circular aureole of angels is of so frequent occurrence in art that it would be tiresome to give a list of examples; but the most conclusive fact is, that it is common to the Greek Church at this very hour. One description from their "Guide" (which, however, contains many) will be sufficient. It describes how to paint two cupolas at the entrance of a church, thus:—"Describe a circle and make Christ in the middle with the order of angels." Again, "Describe a circle for heaven, in the midst make the Holy Virgin with the infant Jesus," etc. Those who have seen the Fairford windows will recognise, in the first, an exact counterpart of the arrangement in the Last Judgment. Mr. Holt will hardly say that Albert Durer taught this to the Greek Church.

But now let us examine the principles and the purpose of mediæval art. It would be too long to go back to the early struggles of art in the Christian Church, but we will go at once to that event by which its future and its intention were determined—the second Council of Nicea in the year 787. Two short quotations from the records will serve. It was decreed that "the composition of pictures was *not* the invention of the painter, but the approved legislation and tradition of the Church." Again, "the art *alone* is the painter's, but the ordination and disposition the holy fathers'." Nothing can be clearer than the meaning of these words; it simply shows us, that the painter had nothing to do but to paint his subject as he was told; that the manner in which it was treated was dictated to him; and that the arrangement of his work in the church was according to a law which he had to obey. And if it had not been so, and the artist had been allowed to do as he pleased, of what use would the art have been? For it was not intended for the amusement of dilettanti, but for the instruction of the ignorant and unlearned, when reading was the accomplishment of the few, and books were often bought at the price of an estate. Hence we find the writers of the time so frequently calling "paintings in churches" "the book of the unlearned," and in the Greek, the forcible term of "living writing" has been applied to them. So art was conventionalised, and became thus a language intelligible to the whole Christian

world. It developed itself, as everything that has life does develop, until the sixteenth century, when it is not too much to say it had become a literature, the history of which has yet to be written. How truly it performed its duty as a teacher, in rousing the mind, and awakening thought, I hope to be able to show you by two or three examples; and if we smile sometimes at its simplicity, we must remember that that was really a part of its system, as it was addressed to minds both ignorant and childlike.

It is probable that, during the Middle Ages, each artist or school had its manual or guide to ecclesiastical conventions, and which also contained receipts for the manipulation of the work. In fact, such a manual was discovered amongst the Greek monasteries by M. Didron, as now used by the Greek Church; and when I allude to the "Guide," I speak of that work—the most interesting contribution to the history of art given in our time.

The first illustration shall be the story of the Rich Man and Lazarus. It was of very frequent occurrence, as many examples have been discovered in England, more or less imperfect, and one general mode of treatment was constantly observed. The most recent instance is that at Ulcombe, Kent, found about four years ago, and although much mutilated, it affords us an excellent idea of the subject. The rich man is at a banquet, seated at the head of his table, entertaining his friends. He is giving his commands to the porter at the door, outside of which stands the half-naked beggar spotted all over with leprosy. The action of the porter, rudely as it is executed, expresses the scorn and insolence of the serving-man in obeying his master's orders. He is striding towards the door, staff in one hand and in the other the beggar's dish; for it was usual for the beggars in the Middle Ages to carry a dish for alms, mostly given in food, and it was the custom for them to rattle the spoon against it to attract attention, hence it was called the clap-dish. Now this dish is in the servant's hand, which he holds tilted aside in such a manner, that had it contained a contribution of crumbs from the rich man's table there was small chance of their reaching the poor Lazarus without. This little bit of satire was a happy thought of the artist, which I do not remember to have seen in other instances.

Immediately beneath this we have the sequel of the story.

The rich man, stretched upon a sumptuous couch, is in the agonies of death: a demon clutches at his soul, represented in the usual manner as a small nude figure issuing from his mouth. Opposite to him lies the dying Lazarus, loathsome with disease; an angel descends from heaven to receive his soul.

The subject, however, is not complete here, nor have any examples been found on the walls of our churches, that I am aware of, that are; but we have them in manuscripts, which make up the deficiency. "Abraham's bosom" is represented as a venerable figure, seated, holding the soul of Lazarus in his lap; beneath him, surrounded with flames, lies the soul of the rich man, who, looking upwards, significantly places his finger upon his tongue. The work at Ulcombe is of the thirteenth century.

This subject is frequently associated with that of St. Michael weighing souls, remains of which exist at Ulcombe, the purport of which was to enforce the moral of the necessity of good works yet more. At Ulcombe they are placed near the south door, and generally the former is found at the entrance most used by the rich or chief people of the parish. At the church of St. Lazare at Autun, the beggars still congregate near the side door over which the story of Lazarus and the Rich Man is represented.

I may here, perhaps, make some few remarks upon the introduction of the angel and demon in this subject, because it has precisely the same signification as in that of the Crucifixion as at Fairford, and was common to mediæval art in other like instances. It was laid down as a doctrine, that at the moment when martyrs expire in confessing their faith, "angels carry to the bosom of God their victorious souls, singing songs of triumph." And in the legend of the penitent thief, St. Dismas, as given by Petrus de Natalibus, it is stated that our Lord gave command to an angel to convey him to Paradise. So also the old Latin rhyme,—

" Gestas damnatur, Dismas ad astra levatur "

expresses the idea which the mediæval artist endeavoured to embody.

The demon in mediæval art often plays a part full of grim humour: for instance, the soul of Judas Iscariot is sometimes represented as being tossed from one to another as a

ball; and in Egerton MS. 745 in Brit. Mus. there is an illumination showing the soul of King Dagobert being borne away in triumph by them to the sound of pipe and tabor. Unluckily, they are met by a saint, who speedily routs them and compels them to forego their prey. Also, in the Fairford windows, one most ungallantly endeavours to bear off a lady in a wheel-barrow, who deservedly scratches his face, a practical commentary upon his ill manners.

I will now pass to a subject of great interest, "The Parable of the Wise and Foolish Virgins;" and the example I shall call your attention to is at the west front of Strasburg Cathedral. Nothing in mediæval art north of the Alps surpasses this admirable work; for if it be the true property of art that it should at once possess thought, and be the exciting cause of thought in the beholder, this work is entitled to the highest rank. But in addition to this it is fine in execution, and has certain special technical merits that belong only to sculpture of the best schools.

This subject is generally placed at the door south of the main central entrance at the west end of a cathedral, and occupies this place at Strasburg. The doorway is recessed, and the figures are arranged within the recess, and also on the return of the angle. On the right hand of the spectator entering are the "Wise Virgins." These are headed by the figure of Christ which, placed nearest to the door of the church turning towards them in act of benediction, invites their entrance. These figures, all veiled and in simple but ample drapery, are graceful and varied in attitude, yet full of repose. Their expressions are modest, serene, and placid; each one bears a lamp burning. But the genius of the artist is most shown on the opposite side, where are arranged the five "Foolish Virgins." These are headed by the Tempter, whose figure is placed at the angle of the recess farthest from the door of the church. This fact is worth noting, as it shows even in the arrangement how much was considered in the due telling the story. The conception of this figure is a triumph of genius. It represents a handsome young man, gaily attired in the fashion of the time. His well-fitting jupon is girt at the loins with a jewelled baldric, his hose terminate in the longest and sharpest of pointed shoes; and his rich mantle is fastened on the right shoulder by a handsome clasp. His countenance has a free, joyous,

voluptuous expression, and that indolent look that the Greek artists frequently give to their heads of Bacchus ; and his well-combed locks are bound about his brow with a chaplet of roses. In his right hand he holds an apple, the symbol of the fall, and upon this he appears to be descanting derisively. But the artist has not allowed this fair external to be misunderstood ; for beneath the mantle, crawling over his bare back, are loathsome reptiles, typical of the moral deformity within, that is so gaily masked. To the lady on his left, his discourse appears to have wonderful charms. In an ecstasy of laughter and delight she has dropped her lamp, and it lies broken at her feet ; but it gives her no trouble ; she rather considers it a good joke and points to it, showing how little it affects her conscience. The figure next to her holds her lamp reversed ; the expression is pensive, with a countenance of painful anxiety, and is exceedingly elegant and graceful. That next to her and close to the church door has a similar expression, but more absorbed : she seems as if she had just knocked at the door and had been denied admittance, and with smitten conscience reflects upon consequences. On the right side of the Tempter, on the return face of the angle, are the two other figures to make up the five. One has an air of pleasing voluptuousness ; the other of somewhat insolent indifference. My description does not do justice to this noble work, but at least it shows, that it bears the impress of no common mind.

The subject is a favorite one and has been frequently repeated—a pretty but later instance occurs at the church of Our Lady, at Treves, but I will compare that at Basle as bearing directly upon my argument. Here we have a somewhat earlier and very inferior hand. Yet here is the attempt to carry out the subject in a similar way to that at Strasburg, and remarkable beyond everything, there is the “Tempter with the apple and the laughing Virgin by his side,” showing the same thought at work, but as in one case, it was dealt with by a genius, here it is only by a very ordinary man. Who then was author of the idea ? He of Strasburg, or he of Basle ? The latter is the earlier, but I deny it to either. Both were working at ideas that were common property, the suggestion of which came from the church itself according to the principles I have previously stated. Besides the examples given, the subject will be found at Freiburg in

Breisgau, at the church of St. Denis, at Rheims, Chartres, Amiens, and many other places.

My next illustration will be from one of that class I term "moralities." They are the most interesting of all, as they show the means employed of exciting the imagination by poetical suggestions, but strictly bearing in mind the great office of instruction which art had to perform. Amongst these, that which teaches the moral of human life, commends itself to us, by the interest of the subject and its long history, both in art and literature. In art we can trace it back to the twelfth century, and I shall show that it still influences the popular art prepared for the provinces of some of our continental neighbours. It will be impossible, for me here, to go back into the literature of antiquity, and trace the history of the division of man's life into so many ages. For our purpose, it will be sufficient to accept the fact, that the philosopher and the physiologist had, in very early times attempted to classify the years of man's life into so many definitive periods, and it was in this that the poetry and art of the Middle Ages found the motives of their subject. But besides this phase, there was another which sought to teach the instability of human life or human fortune, and it is under this division of the subject that we get the first development in ecclesiastical art. It is under the form of a wheel, the wheel of fortune or the wheel of human life, that life's uncertainty was attempted to be typified. The earliest example is at Verona, where it appears as a wheel-window in the west-front of the interesting church of S. Zeno, a church so full of early art, that one might almost write its history from the examples it contains. Without a drawing, however, I cannot describe it fully, I shall, therefore, content myself with stating, that a number of figures are represented, rising on the edge of the wheel on one side, and falling on the other. On the top, is a figure sitting in regal dignity, and at the bottom, a prostrate figure dead. The name of Briolotus is attached to this work, a most exceptional, and therefore, interesting fact, for it is rare indeed for an artist's name to be recorded on his work during the Middle Ages.

We will now cross the Alps again, and at the cathedral of Basle we have a very illustrative example of the same description. This is somewhat later in date than the last, and, perhaps, was not completed until early in the

thirteenth century, nevertheless the character is Romanesque. Here, near the periphery of the wheel are a number of spokes like the rungs of a ladder, upon which the figures climb. These are ten in number, and the first, a youth, is about to commence the ascent with one arm on the upper stave and upraised leg. A similar attitude marks the second. The third is more confident, and makes no use of his arms and so the fourth. The fifth figure is seated upon the summit beneath a canopy, and wears a cap of dignity; this marks the zenith of human glory. The sixth figure commences the descent, which exhibits a whimsical rapidity, yet this figure, although fallen from his high estate, holds firmly by the spoke and yet retains the cap of dignity. But the seventh, and eighth are falling precipitately headlong: the ninth has almost ended his rapid course, whilst the tenth and last is stretched out in death at the bottom. This figure is peculiarly interesting, for it represents a mason still holding a stone with his left hand, and in his right his trowel. Death has arrested him in the midst of his labours. Of course this has a special as well as a local significance. The architect or master-mason of the church died during the progress of the work, and this event was seized upon by the artist to enforce the moral of human life. Within the church are two seated figures, representing the two architects holding a consultation with each other upon the fabric. This purpose is so stated in some Latin lines by the side.

At Beauvais we get another instance, also of the Romanesque period, probably, late in the twelfth century. It has the same general characteristics of figures ascending on one side and tumbling down on the other, the sides being here reversed. But it also has some specialities. A figure seated at the top aids those ascending, but thrusts down those who have passed the zenith with a staff to hasten their descent. Whether this figure is intended to indicate human fortune or fate, or whether, as is perhaps more probable, the genius of time assisting those who enter upon life's course, but past the summit hastens their downfall, it is not easy to decide: at any rate the purport is clear enough. There are two small figures, which neither belong to the ascending nor descending series, and but for the assistance derived from the "Guide" of the Greek church, I could not even offer a hint at

the intention of them. But it is probable, they may be intended to symbolize Night and Day, whose ceaseless course measures the duration of human life. Beneath the wheel, as in the former cases, is the figure of one dead. This interesting work is at the north transept of the church of St. Stephen and is much mutilated. Here then we have three examples widely separated from each other in three different countries, yet having the closest analogy with each other.

Amiens Cathedral presents us with a later example of the same subject, and with a treatment somewhat varied. It is at the south transept, and forms a semicircular piece of ornamentation consisting of a series of cusps over a window. Here are 17 figures, eight of which, young and beardless, ascend in a variety of attitudes, by grasping at the cusped projections. On the summit, is a royally-attired figure seated, with a hound at his feet; eight figures also make up the descending group; they are bearded, and as they reach near to the termination of their course, they tumble down headlong in a great variety of attitudes, some of which are whimsically, but forcibly conceived. It is excellently worked, and probably belongs to the close of the 13th century.

Now in none of the foregoing subjects has there been any attempt at discrimination of character, or great distinction of ages. But this development soon ensued. At Sienna Cathedral there is a wheel of human life composed of inlaid work upon the floor, in which the characters are defined, but not having seen it, I can only say upon the authority of those that have, that it is a fine work of the 14th century. In default of having this for consideration, I shall bring before your notice an example from Arundel, MS. 83 in the British Museum, of the same period, which in interest cannot well be exceeded, and is also beautifully executed. This is composed after the manner of a wheel, but at the termination of each spoke, is a medallion containing a subject illustrating one of the phases of human life. These are ten in number, and each has an appropriate legend in Latin. The centre of this wheel has the head of the deity thus inscribed:—"I discern all things at once—I govern all by reason."

The first medallion has the nurse with a baby, (the earliest instance in which I have found this development) sitting by a fire with caldron over it. The legend attached to it alludes to the condition of childhood, "gentle and humble."

The second is a boy sleeking his hair with a comb and holding a mirror, and the legend is "that this age is approved in the glass." But boyhood is not the age of youthful vanity, we may therefore, I think, dispute the propriety of this illustration.

The third is a young man holding a balance to which he is attentive, and the legend makes him say "he will not slip or stumble." The intention is to show, that youth with no experience, thinks that all will come to them as they devise, they at least will not fall.

The fourth is a young man on horseback with hawk on fist. This, with the legend annexed, implies that at a period when the physical development is at its height, life delights in sports of the field and all that requires the exertion of bodily energy.

The fifth is at the summit ; here as in previous examples, it is a king on his throne. The legend is, "that he governs the age, and the whole world is his."

The sixth is on the decline, the man enveloped in more ample coverings, holding a staff in his left hand, looks back regretfully upon his past estate. He has now, as the legend says, "taken to himself a staff, and is almost marked by death."

The seventh is an old man blind, leaning upon a staff in his right hand, the other resting upon the shoulder of a little boy who leads him, and with one hand steadies his staff. The legend is, "given up to decrepitude, death to me is life."

The ages of man's life truly end here, and the subjects that follow, merely give the moral. So the eighth shows the old man on his deathbed with a physician by his side. The ninth is a bier, with two candles burning at each end, and a priest reading the offices of the dead. The tenth and last is the tomb, the legends of the two last ending with, "Life has deceived me."

At the four corners are the four main divisions of life, Infancy, Manhood, Age, and Decrepitude.

In this interesting example we have a curious instance of errors, which certainly tend to prove what I have previously advanced, viz., that the mediæval artist acted under instructions given elsewhere. In the original miniature, the legend given to the second age,—the boy with the glass, is mis-

placed, and given to the third,—the youth with the scales. Thus to the last the legend is "Life worthy of the age is approved in the glass," which clearly belongs to the youth with the mirror; and the other, "I will never be uncertain—I measure age," belongs to him with the scales. The artist evidently was not a clerk, and has blundered at his instructions, and most likely not only in this particular. For, as I mentioned, personal vanity is not the characteristic of the boy, it belongs to the youth. That I am justified in thinking then that there is a mistake, I refer you to some short Latin rhymes (Harl. MSS. 5398), on the "Seven Ages." In these the second age, or boy, is spoken of as flying from restraint and rejoicing in play, in the same feeling exactly as expressed by Schiller in his beautiful poem of the Song of the Bell, a poem which is upon human life in its different phases. His words are literally thus: "From the maiden rushes proud the boy." And in other examples you will find mediæval art is consistent with this obvious characteristic. The third age, however, in the old Latin rhymes runs thus:—"In speculo vultum considero pecten capillos." Here we have both the speculum, or mirror, and the combing of the hair alluded to, as before, and which correctly belongs to "adolescens," or the youth. This blunder—for it certainly is one—is at least a fortunate one for my argument, although I did not want it for proof.

It will be interesting to compare this beautiful development with one on the same plan, but more amplified still, in use in the Greek Church, because there the mediæval traditions are absolutely unbroken, and paintings are still executed by monk artists as they were in the 12th and 13th century. I shall not go through the dry details of the "Guide," which gives instructions to the artist, but give a brief summary, for in that, you will not fail to perceive, how highly poetical are the suggestions it contains.

Leaving the 14th century, we see, no more, the wheel as a symbol in the moral of human life. But the ages of life still continue to be developed in various ways. Formerly, a series existed at Canterbury Cathedral, confined to six ages, accompanied also by six figures representing the six ages of the world; but at my last visit to that church I was unable to find any traces of it.¹ But in the church of St. Nizier, at

¹ It may nevertheless still be preserved in part, at least.

Troyes, in France, are some painted windows, somewhat mutilated, in which this subject is treated; date the close of the 15th century. Each subject here is accompanied by a female figure, who seems as if performing a part analogous to that of the chorus in Greek tragedy, and points the moral. It possibly may be intended as the genius of life, which changes according to the different phases of human existence, but the intention is sometimes obscure.

The first is a little boy on a hobbyhorse; a female figure in ample drapery, holds a reliquary. Second, This is evidently the lover, to whom a female with long flowing hair, the type of maidenhood, presents a rose. Third, A young man, with hawk on fist, about to mount his horse; this is imperfect; but this idea we saw in our last example. Fourth, The female presents a *monstrance*, in which is the host, to a man holding a book. This must be the man of law or justice, and possibly the host is to remind him of the sacrifice made for all sinners. Fifth, The female is presenting a ship. This must be the man of traffic, or gain; an idea, that in a certain period of life gain is uppermost in the mind. We shall see this further illustrated. Sixth, The female presents to a man upon crutches, a clock: this is plain enough. It is to indicate that his hours are numbered. Seventh, and last, The man is on his death bed, his hands clasped in prayer, by his side this mysterious female is holding an uplifted sword; it is a symbol of Justice, which summons him to judgment. Death holding a mattock, strikes him with a dart.

These details are, perhaps, somewhat tedious; yet the subject so fully illustrates the object of mediæval art, that I shall ask your patience yet further. Of the same period as the last is another example at the Hospital St. Mary, at Ypres. It is on a brass to the memory of Peter Pauwelyns, 1489.

First, Here again we have the nurse with the baby before a fire, over which is a caldron. Second, A woman, seated, is holding out an apple to a child in a go-horse. Third, Two boys pursue butterflies with their hoods. Fourth, Here we get the schoolboy reading a book on the lap of a pedagogue, seated in a chair, and holding in one hand the awful symbol of authority, the birch. Fifth, Boys walking on stilts. Sixth, Boys playing at whip-top. Seventh, Two youths playing at

sword and buckler. Eighth, Young men leading a lady. Whilst, Ninth, A youth plays their wedding-march upon a pipe and tabor; the bridal crown beside. Tenth, Men and women playing at draughts or tables. Eleventh, a man offers a ring to a lady. Twelfth, Men playing at a game which schoolboys are familiar with, viz., Buck, buck, how many horns do I hold up?² Thirteenth, a man, with a rosary, praying before an open chapel. Fourteenth, an old man, going down-hill, with a staff. Fifteenth, Death, a priest, attended by a cleric, is placing lighted tapers in the hands of the old man, propped up in bed with pillows. Sixteenth, A catafalque, with two crosses at head and foot, with lighted candles. This curious example presents us with many analogies with the foregoing; but it is remarkable, that in neither of the two last is very much made of the zenith of human power so conspicuous in early treatment; but I shall presently show you that the idea was not abandoned.

With this we come to the end of the 15th century; and in the 16th century I know of no example in painted glass, or any other decoration of a church. But the subject was by no means lost sight of; and we now find it in popular engravings, having the same object in view, called the degrees, or grades, of human life. The most suggestive I have seen is Italian, about the middle of the 16th century. The "Grades" are represented by nine figures, on so many steps, ascending and descending, and each representative figure has one of an animal, analogous to the condition of the age, accompanied by explanatory couplets. Thus, First, a young child in a go-cart, with a spoon in his hand, has a young pig for his emblem; eating being his principal occupation. Second, a Schoolboy with his books, is like to a young lamb, who gives future adversity no heed. Third, a Youth holding a branch of myrtle, with a little Cupid at his feet, bending his bow; the lover is as a young goat; and is much troubled by the deceits of the God of Love. Fourth, The soldier is represented as a bull, and runs risks because of his great strength. Here we have the analogy, with the "bubble reputation in the cannon's mouth." Fifth, At the summit is the Justice with the fasces, a man of forty years; a lion is his emblem, because king of animals, as he the chief of men. Sixth, the man of fifty years commences the descent. In his hands,

² *Qy.* Is this the game of "moro?"

are his ink-horn and pen-case ; at his feet, books and an hour-glass. He is the man of traffic or business ; his emblem is a fox. Seventh, The man of sixty ; he holds an olive branch ; his helm, cuirass, shield, and spear, are at his feet, and he stands upon them ; meaning, they are no more for him. His emblem is the wolf ; because, as the legend tells us, he puts his care in acquisition, as the wolf in prey. The man of seventy is in long furred robe, spectacles on nose, and slippered feet ; he holds a tablet on which he is reckoning coin. He is likened to the hare-hound ; as a man that has "a sack-full of sins." The man of eighty, blind, and seated upon a tomb, one foot within it ; is as an old ass, that, mumb-ling, eats. The moral is further carried out by representations of heaven and hell, with angels bearing off souls on one side, demons on the other, and, in the centre, death sharpens his scythe.

Now, every one must see the close analogy that exists in this curious composition with the lines of our great poet. How many thousand readers of Shakspeare are there that would ascribe to his invention the moral of the "Seven Ages"? Yet, literally, there is not a single development that has not been anticipated in mediæval art. Does this detract from his genius? Not a whit. It has been said by an eminent American writer, "that the greatest genius is the most indebted." This subject, developed both in art and poetry, Shakspeare takes up with admirable skill ; he uses that which is essential, he rejects that which is not ; and the floating thoughts of centuries he determines, and in a few pithy expressions has condensed them into a whole so complete, that we can never now think of the ages of human life out of his own words. This subject alone is sufficient to prove what a noble teacher was the art of the Middle Ages, when no other way of silently instructing the masses existed. So much, indeed, has this subject influenced the popular mind, that its representation is still prepared on the continent, and is got up in Paris for the provinces.

As regards the Fairford windows, one of the great points of interest in them is, that they are probably one of the latest examples, and also one of the most complete, of the systematic decoration of a whole church according to mediæval traditions ; because, fifty years afterwards, these traditions were almost discarded. They also have a spe-

ciality in the figures presenting the persecutors of the church on one side of the clerestory, and the benefactors on the other, of which I know no other examples. Looking upon them, then, as about the last great work of mediæval art in this country, and probably the most perfect instance in Europe, of a church entirely filled with painted glass of one plan and date, they have an interest that cannot be too highly prized.

ANCIENT SUN-DIALS.

Especially certain Irish Examples of Ecclesiastical use ; as illustrated by notices and drawings by the late Mr. GEORGE V. DU NOYER, M.R.I.A.

THE investigation of the means employed by the nations of antiquity for measuring time, and the earlier forms of the dials or other horological instruments with which they were acquainted, presents a subject well deserving of the consideration of the antiquary. A few examples of Roman dials have been preserved, none, however, it is believed, have been brought to light in the British islands, unless the curious specimens found at Dover and lately published in this Journal may be regarded as a relic of the Roman period.¹ Dials of early mediæval date are also of great rarity, and a brief notice of certain ancient sun-dials in Ireland cannot fail to prove interesting to the archæologist, no special attention having hitherto been directed to this curious class of Irish antiquities.

It may obviously be supposed that, in mediæval times, before the general introduction of those more complicated productions of mechanical construction with which we are now familiarised, the requirements of daily life, and especially the necessity of ascertaining the stated periods of the daily services of the church in their regular course, must have led to the construction of numerous dials or other contrivances for indicating the lapse of time. It is indeed probable that on or adjacent to many of our earlier ecclesiastical structures, some such appliances must, from a very early period, have existed, although now rarely to be found. The student of church architecture will not have failed to notice on the buttresses or in other portions, on the southern sides of many churches in England, especially of the later periods, the frequent occurrence of vertical dials, mostly of rude and unskilful workmanship, which however may doubtless have sufficed to indicate the appointed canonical hours prescribed by the ancient rituals. Of such dials those best known,

¹ Archæol. Journal, vol. xxi. p. 261.

probably, exist at Kirkdale in the North Riding of Yorkshire, and at Bishopstone in Sussex: the latter has been figured in this Journal. An account of these and of other early examples in England, is subjoined to the following description of certain dials in ancient cemeteries in Ireland, which seem to have been unnoticed.

The examples of dials of comparatively early date hitherto noticed by writers on the Ecclesiology of the Middle Ages, in the British Islands, are of the greatest rarity; they claim more careful investigation than seems to have been devoted to so interesting a subject of archæological investigation. Amongst the earliest and most remarkable of these examples may be noticed the vertical sun-dial, to which a date as early as Anglo-Saxon times has been attributed, placed over the door of the south porch at Bishopstone church, Sussex. It has been figured in this Journal, from an accurate drawing by the late Mr. W. Figg, F.S.A., of Lewes. The church presents some indications of Anglo-Saxon masonry, as we are informed by Mr. Parker, in the appendix to his recent edition of Rickman's Architecture. The dial may be assigned possibly to as early a period as the tenth or eleventh century; it is ornamented around the upper margin with the *mæander* or Greek fret, found frequently in Anglo-Saxon decoration, and the Saxon name²—EADRIC—is introduced in the space under this ornamental bordure. The letters, however, seem to partake more of Norman than of Saxon forms, and it has been supposed by some antiquaries that the name may possibly have been inscribed on the dial subsequently to its construction. Mr. Edmund Sharpe, whose knowledge of ecclesiastical architecture and constructive details is well known to readers of this Journal, made careful examination of the structure in his survey of the churches of Sussex previously to the meeting of the Institute at Chichester in 1835. He observes that the dial is probably one set up at the time of the Norman or transitional additions to the church at Bishopstone, more probably the latter; and the name which occurs on it, *Eadric*, may be that of the early founder thus commemorated.³ The dial is not formed of the

² Ibid. vol. xi. p. 60.

³ The Rev. D. Haigh, in his memoir on the Saxon Cross at Bewcastle, on which a dial is to be seen, attributes the example at Bishopstone to the seventh century,

and suggests that Eadric may have been a prince of the South Saxons, son of Egberht King of Kent, who killed his uncle Hlothari, A.D. 685; Archæologia Æliana, vol. i. 8vo. series, p. 179.

rough, yellow sand-stone of which the Saxon long-and-short work of the porch and west end of the church is constructed, but of Caen stone.⁴

This dial indicates prominently five of the seven great canonical divisions of the day, namely, matins (6 A.M.), none (9 A.M.), sext or mid-day, undern or tierce (3 P.M.), and vespers (6 P.M.);⁵ each of the intervening spaces being again subdivided into three hours, thus making up the twelve hours from 6 A.M. to 6 P.M., in accordance with the old Jewish division of time called "the old unequal planetary hours," which the early Christian Church universally adopted.

There exist other early examples of vertical dials of similar character, of which the most remarkable is to be seen over the south porch of Kirkdale church in the North Riding of Yorkshire, as noticed in this Journal in the account of the dial at Bishopstone before cited. The Kirkdale dial is accompanied by a Saxon inscription, which has been explained as commemorating the purchase and rebuilding of the church of St. Gregory by Orm the son of Gamal, in the days of Edward the Confessor and of Earl Tosti. It is supposed to have been constructed between the years A.D. 1056 and 1065; an inscription under the dial records that it was wrought by Hawarth and Brand the *presbyter*.⁶ In this instance each of the spaces intervening between the principal divisions is subdivided by a single line instead of by two, as at Bishopstone. If these minor lines are equidistant from those which are considered to indicate the five great canonical hours, the dial at Kirkdale would mark the following divisions of time:—

6 A.M.	.	.	Matins.	1½ P.M.		
7½ A.M.	.	.	Lauds.	3 P.M.	.	Tierce.
9 A.M.	.	.	Nones.	4½ P.M.	.	Compline.
10½ A.M.	.	.		6 P.M.	.	Vespers.
12	.	.	Noon.			

⁴ See also Sussex Archæol. Collections, vol. ii. p. 279; vol. viii. p. 322; and Mr. M. A. Lower's account of Bishopstone church, Gent. Mag., 1840, vol. xiv., N. S., p. 496, where likewise the dial is figured. It is there pronounced to be of Saxon workmanship.

⁵ Lauds, which intervene between

matins and nones, may have been indicated by one of the minor divisions between the lines which mark those periods. Compline, between tierce and vespers, may also have been denoted in like manner.

⁶ See a memoir by Mr. J. C. Brooke, Archæologia, vol. v. p. 188, plate xiv.;

At the church of Edstone in Yorkshire, near Kirby Moorside, and about two miles distant from Kirkdale, a similar semicircular vertical dial, attributed to Anglo-Saxon times, exists over the south door. It appears to have been noticed only by the historian of Whitby, the Rev. G. Young, who has given a representation of the stone. The divisions are in this instance similar to those on the dial last noticed; the lines radiating from the gnomon being seven in number. Over the semicircle there is an inscription which has been read + ORLOGIU . . . ATORYM., (possibly *orlogium viatorum*) and on the left + LOTHAN ME WROHTEA.⁷

A semicircular dial of the same description is introduced amongst the elaborate interlaced and other ornaments on the obelisk or cross in the churchyard at Bewcastle, Cumberland, a monument regarded by archæologists with so much interest on account of the inscriptions in Runes which it bears, and the curious sculptures covering each of its sides. The dial is to be seen on the south side, at a height of about ten feet from the ground. The radiating lines are now somewhat indistinct, owing doubtless to the action of the weather on the stone; the semicircle was divided, however, as in the examples already described, into four principal segments; the intermediate divisions are not now distinctly seen. A representation of this remarkable cross has been given from a drawing by Lysons in his *Magna Britannia*,⁸ and a plate has recently been prepared from a drawing by the Rev. J. Maughan, rector of Bewcastle, for the work on Northern Runic Monuments by Professor Stephens of Copenhagen. The Rev. Daniel Haigh, to whose patient investigation of the inscriptions we are indebted for a very curious dissertation published by the Society of Antiquaries of Newcastle, has sought to prove from the Runes that the Bewcastle monument was erected to the memory of Alcfrid, son of Oswiu king of Northumbria; it is supposed that he died A.D. 664.⁹

Three ancient dials which exist in Hampshire have been

Camden's *Britannia*, ed. Gough, vol. iii. p. 330; Pegge's *Sylloge of Inscriptions*, p. 20; Young's *Hist. of Whitby*, vol. ii. p. 741—746.

⁷ Young's *Hist. of Whitby*, vol. ii. p. 747.

⁸ *Hist. of Cumberland*, p. excix. The

Bewcastle obelisk is figured also by Cardonnel, *Picturesque Antiqu. of Scotland*.

⁹ *Archæologia Æliana*, 8vo. series, 1857, vol. i. p. 149; the Runes on the cross are there figured, and explanations given, p. 169. See a notice of the dial, *ibid.*, p. 177.

described and figured in a memoir by Mr. Haigh in the *Archæologia Æliana*, and in the Transactions of the Archæological Association. Of these, one is in the south wall of the church of Corhampton, a structure assigned to the Saxon period, and supposed by Mr. Haigh to have been erected by St. Wilfrid, the apostle of the South Saxons; another is to be seen at Warnford, where the church was rebuilt by Adam de Portu in the twelfth century on the site of an earlier fabric erected by St. Wilfrid; the third is in the south wall of St. Michael's church, Winchester.¹ These dials are all of the same general type, a circle with foliated ornaments issuing saltire-wise beyond its verge, the lower moiety of the circle being divided by lines radiating from a central gnomon; in the two examples first named the divisions are only four; on the dial at Winchester there are ten, three of the radiating lines being marked by crosses, as at Kirkdale and elsewhere; the tenth, on the left side, is drawn beyond the line which in all these vertical dials marks the diameter of the circle.

Several other relics of this curious class and of early date might doubtless be found. Mr. Haigh has noticed a small, plain dial at the church of Headbourne Worthy near Winchester, in which portions of ancient work exist; there is also a dial in the south wall of the Saxon tower of Barnack church, Northamptonshire, and another may be seen in the south wall at Swillington, Yorkshire, in which instance the circle is complete, the lower moiety being marked for the dial. Of later date is a semicircular dial at Old Byland in Yorkshire, which bore the maker's name . . . TIDEMAN . . . ME FECIT.²

It is scarcely needful to remind the reader how commonly there are to be found on the southern sides of village churches in all parts of England, and especially on the vertical surfaces of the buttresses, rudely traced dials, some of them probably of considerable antiquity. Certain horological relics, also, of a different description are probably to be found not undeserving of the consideration of the archæologist. At the annual meeting of the Kent Archæological Society at Canterbury in 1858, Mr. Beresford Hope brought before the assembly a decorative tile forming a sun-dial,

¹ Arch. Æliana, *ut supra*, p. 177; see also Transactions Brit. Arch. Assoc.,

Winchester Congress, 1845, pp. 408, 410.

² Archæologia Æliana, *ut supra*, p. 179.

found near St. Ethelbert's Tower at St. Augustine's Abbey. It has been placed in an oak frame and deposited in the museum of the college that now occupies the site of that monastery.³

It is probable that mural sun-dials are also to be found on churches in foreign countries not less deserving of notice than the examples that have been thus briefly described; we are not aware, however, that any special attention has been given to the subject by antiquaries in France, Germany, or other countries, who have investigated so fully the details and accessories of ecclesiastical architecture. One example of some interest occurs to our remembrance. On the south side of the Minster at Freiburg in the Breisgau, a fabric commenced in the middle of the twelfth century, but mostly of the later part of the thirteenth, a figure in secular dress is to be seen, introduced in a niche on the crocketed pinnacle that surmounts one of the buttresses, namely, that nearest to the south transept.⁴ This personage, sometimes regarded traditionally as the builder of that portion of the church, is represented as holding in his left hand a semi-circular vertical dial, precisely similar to some of the early examples above described as existing on churches in our own country.

To the kindness of a lamented friend, the late Mr. George V. Du Noyer, an acute investigator of ancient relics in the sister kingdom, and by whose skilful pencil the pages of this Journal have on many former occasions been enriched, we are indebted for the following notices of ancient Irish sun-dials, and also for the interesting illustrations that have been prepared from his drawings.

“There exist in Ireland certain dials apparently of considerable antiquity, that differ from those familiar to the antiquary in England, which are mostly formed, as at Bishopstone, Sussex, Kirkdale, Yorkshire, and elsewhere, on the southern walls of churches, the usual position being over the south door. The Irish examples which have come under my notice occur on flat, erect slabs, placed like head-stones

³ *Archæologia Cantiana*, vol. i. p. lxxii.

⁴ The south aisle, the part of the Minster in which the figure above noticed occurs, may be of about the same period

as the admirable spire, commenced, it is believed, in 1283, and finished in 1330. See Moller's *Denkmäler*.

in ancient cemeteries. These objects will doubtless prove of interest to the archæologist, since to the present time attention has not been directed by antiquaries in Ireland to this particular subject of investigation.

The first dial, of which a representation is here given (fig. I.), is from the graveyard of the ancient ecclesiastical structure, now in ruins, on Inishcaltra, or Holy Island, in Lough Derg in the Shannon. It is on the top of a slab measuring 5 ft. in length by 16 in. in breadth, and intended, like the other Irish dials hereafter noticed, to be placed erect in the ground. These, with one exception, consist of a simple semicircle divided by radiating lines, so as to indicate the hours from six in the morning until six in the evening, according to the usual construction of an erect south dial. On the dial at Inishcaltra, the semicircle is divided into four nearly equal parts by five lines deeply cut; the perforation at the centre is large, and intended possibly to receive a gnomon of wood which, being shaped to a point, threw a slender shadow on or near to the circumference of the semicircle beneath. Each of these lines branches, as shown in the woodcut, with lateral strokes where it touches the semicircle, with the exception of that at the western end of the horizontal line, which has only one branch, while the horizontal line in its extension east of the gnomon has also, as will be seen by the woodcut, a branch on its upper side diverging beyond the limits of the semicircle.⁵ It is probable that the small terminal branches to the principal lines of the dial had a certain significance, and they may have marked certain times before or after the five important

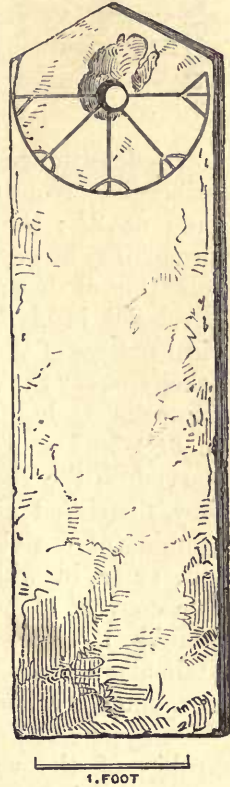


Fig. I.—Dial at Inishcaltra.

⁵ This dial was discovered by the Earl of Dunraven, who gave to Mr. V. Du Noyer a rubbing from which the accompanying woodcut has been prepared.

ecclesiastical divisions of the day. If this be so, we find the following hours indicated :—

A.M.			P.M.	
6	.	.	12 $\frac{3}{4}$	
6 $\frac{1}{2}$	.	.	2 $\frac{1}{4}$	
8 $\frac{1}{4}$	.	.	2 $\frac{3}{4}$	Tierce.
8 $\frac{3}{4}$	.	.	3 $\frac{1}{2}$	
9 $\frac{1}{2}$	.	.	5	Compline.
11 $\frac{1}{2}$	.	.	6	Vespers.
12	.	.	6 $\frac{3}{4}$	
		Noon.		

I have determined these hours by measurement, and it is possible that Nones might have been celebrated at 9 $\frac{1}{2}$, and Tierce at 3 $\frac{1}{2}$; the divisions, as I have here given them, approaching, however, nearer to the absolute hours for the celebration of those services.

Archdall, in his *Monasticon*, affords us the following historical notices of the religious houses at Inishcaltra, anciently Iniskeltair :—"St. Camin founded an abbey here, which was afterwards a church, and still retains his name; he died, A.D. 653, and was buried in his own church; his feast is observed on the 25th of March. St. Coelan, a monk of this abbey, flourished about the end of the seventh century or beginning of the eighth; he wrote the life of St. Brigid in Latin verse, in which he expressly asserts that this abbey was a convent of Benedictines. In A.D. 1027, the great Brian Barombh, monarch of Ireland, erected the church of Iniskeltair about this time. * * * There yet exists here a fine round tower, with the remains of seven churches."⁶

To any one acquainted with the aspect and style of workmanship of the very ancient sculptured stones occurring abundantly in the west of the co. Kerry, on many of which, in addition to rude and quaint crosses, are inscriptions in the Ogham character, probably contemporaneous with the crosses, this sun-dial would be pronounced at once to be a carving of an early Christian period, and I venture to surmise that its date may be either the seventh or eighth century, and therefore contemporaneous with St. Camin or his successor St. Coelan.

The next dial that I proceed to describe is from the graveyard of the old church of Kilmalkedar, in the co. Kerry. (See fig. II.)

⁶ Archdall, *Monasticon Hibern.*, pp. 47, 48.

ANCIENT SUN-DIALS IN IRELAND.

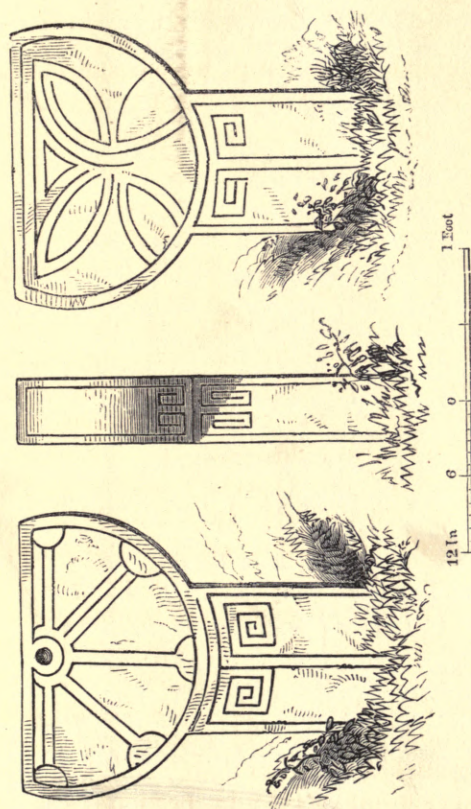


Fig. II.—Sun-dial in the graveyard of the Church of Kilmalkedar, co. Kerry.
From a drawing by the late Mr. George V. Du Noyer, M.R.I.A.

“It is cut out of a thick slab of grit, and now stands about 2 ft. 6 in. above the ground. Its form is that of an inverted semicircle resting on a massive rectangular shaft. Like the former dial, it indicates the five great canonical hours, but by double lines ; the third hour, or tierce, being indicated by three lines. All these branch off into small semicircles, touching the outer rim of the dial. If we are to suppose that the points of the dial touched by these small semicircles were intended to mark time, we have apparently the same periods indicated as those on the Inishcaltra dial, and possibly an extra hour, or period, before matins, as the eastern end of the horizontal line has its small diverging stroke, and the triangular termination, extending above that line. It is worthy of observation, that the outline of this dial is more than a semicircle, approaching to the horse-shoe form ; and it might be of interest to know what resemblance it may bear to those sun-dials called *Khaphir*, stated to have been introduced amongst the Arabians by Abul Harian, about the beginning of the thirteenth century, and so called from their resemblance to the hoof of a horse.⁷ This shape in the Kilmalkedar dial is clearly intentional, and suggests the notion that the maker may have intended the gnomon to mark a period before the hour of matins, and after that of vespers. The reverse of this dial is ornamented by the interlacing of four parts of circles, the lines being in one instance four times repeated, and the pattern thus bearing evidence of not having been finished. A flower-like cross is in this manner indicated ; but if we look only to the spaces intervening between the segments, we get another cross of a different type, namely one of eight points, a form recognized by Irish antiquaries as characteristic of periods prior to the tenth century, and found in connection with Ogham inscriptions.

“The shaft and the sides of this dial are ornamented with the Greco-Irish fret occasionally found on sculptured doorways and arch-mouldings in early churches in Ireland. Dr. Petrie gives, in his *Inquiry into the Origin of the Irish Round Towers*, an example of this peculiar ornament, from capitals at the church of the Monastery at Glendalough. He observes, that the decoration in question does not occur

⁷ See the article *Dialling* in the *Encyclopedia Britannica*.

on any other capitals in Ireland, but that it is very common on Irish tombstones of the ninth and tenth centuries, and in manuscripts of a still earlier age.⁸ He has also figured tombstones at Clonmacnoise, commemorative of persons who died about the close of the tenth century, and on which appear ornaments of a similar type, somewhat modified.⁹ This fret, it should be observed, occurs with the remarkable knot supposed to have been used as a symbol of the Trinity, namely, the *triquetra*, which appears in Irish MSS. as early as the sixth century, and also on tombstones of the ninth and tenth centuries. Dr. Petrie observes that he had seen no example of it on such sepulchral monuments after that period, the latest being on a tombstone at Clonmacnoise, the memorial of Maelfinnia, who is supposed to have died about 991.

"The opinion of so competent an authority in all matters connected with Irish antiquities cannot fail to be received with confidence, and in Dr. Petrie we have a safe guide in the endeavour to determine the age of the curious relic at Kilmalkedar. •

"The old church at that place is one of the most remarkable and perfect of its class in Ireland; the internal decoration, which consists of stunted pilasters forming blank arcades along the walls, renders it in some respects unique, and second only in architectural interest to Cormac's chapel at Cashel. Its date may be assigned to the early part of the twelfth century. The western doorway is semicircular, headed and ornamented with zigzag carving. At the distance of some yards stands the dial above described, occupying probably its original site, although it now faces east and west, and it has been converted to the purpose of a head-stone in the grave-yard. The quaint form and ancient aspect of this relic, hitherto, however, overlooked by the antiquary, has doubtless caused it to be regarded with a certain degree of veneration. In times past, it has been unskillfully copied, to form head-stones of various sizes. The surrounding grave-yard is thickly set with imitations of this

⁸ Ecclesiastical Architecture of Ireland, p. 254.

⁹ Ibid, pp. 323, 324. The varieties of the fret-pattern in early MSS. are numerous, and it is found combined with other types of ornamentation. A good

example of the fret resembling that upon the dial at Kilmalkedar, but somewhat more complex in design, has been given by Mr. Westwood in this Journal, vol. x. p. 288, in his memoir on Early English and Irish Ornamentation.



Fig. III.—Dial from the old church at Clone, co. Wexford.

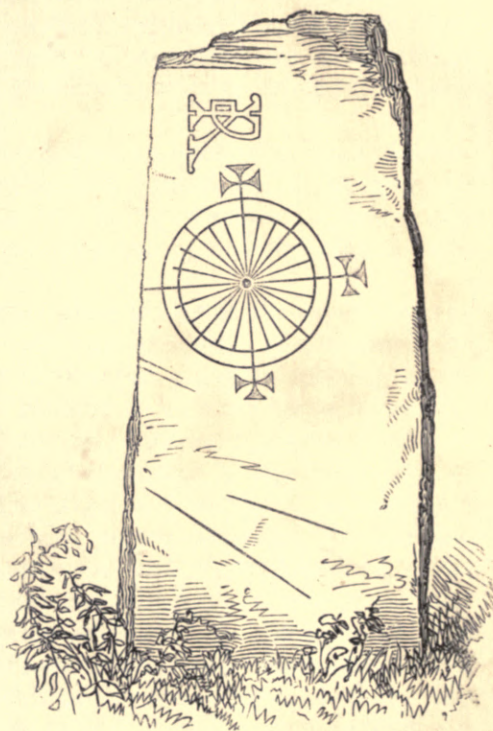


Fig. IV.—Dial at Kells, co. Meath.
Diameter of the outer circle, $12\frac{1}{2}$ in.

From drawings by the late Mr. George V. Du Noyer, M.R.I.A.

wife, benefactors probably to the fabric ; both are expressive of indolent and luxurious ease. Below the female head, and where the springing of the arch commenced, there is a male head, which, from a certain air of grotesqueness, with the shaven crown, and lines starting upwards from the root of the nose, after the fashion of a modern pantomimic clown, and the wide mouth, suggests the supposition that it was intended to pourtray the jester or fool. On a stone just over this head is carved a greyhound or slender dog in relief. The head which corresponded to this last, at the opposite springing of the arch on the north side of the doorway, is wanting ; it may now be seen over the wall of St. Edan, or Moque, at Ferns, to which place it was brought some few years since, when the masonry over the wall was reconstructed. It represents a male head of fair proportions and mild expression. It may have been the portrait of the architect of the church.

“From the general style of this doorway and its decorations, its date may be probably assigned to the early part of the thirteenth century ; and there appears no reason why the sun-dial associated with this church may not be of equal antiquity.

“I now proceed to notice another curious example of mediæval gnomonics in Ireland, namely, a dial incised on a slab of grit-stone (see fig. IV.), now serving as a head-stone in the grave-yard of the church of Kells, co. Meath. Although comparatively less ancient than the dials previously described, this specimen may be worthy of record as it seems to form a connecting link between the dial at the old church of Clone (fig. III.), and those commonly constructed as late as the last century. At first sight, the object of giving to the dial at Kells its circular form, and dividing the circle into twenty-four equal parts, is not apparent. If it was intended to place the slab erect, the lower moiety of the circle would obviously have sufficed ; whilst if placed in an horizontal position, the upper semicircle would have answered the required purpose. I can therefore only suppose that the maker, the initials of whose name may have been indicated by the peculiarly ornamented R so conspicuously engraved on the slab, was required to construct a dial which might be used either in a horizontal or a vertical position. If we place the slab

so that the letter R is in its right position, we must regard the dial as intended to mark the time by the horizontal shadow; the lines dividing the circle into four parts, and terminating in crosses, may be supposed to have pointed north, east, and west. That such was the intention may, moreover, appear to be indicated by the absence of such distinctive mark, where, according to this supposition, the southern end of the meridional line should be found, unless, indeed, the edge of the slab may in that part have been cut away.

"The canonical hours prominently marked upon this dial would thus be, Matins (6 A.M.), Nones (9 A.M.), Prime, or Noon, Tierce (3 P.M.), and Vespers (6 P.M.); the intermediate lines indicating the other hours of the day. A portion of the original iron gnomon remains affixed by lead in the centre of the circle. The lines cut diagonally on the face of the stone seem to be accidental. The cruciform terminations of the principal lines can scarcely be recognized as indicating by their fashion the date of this dial, but it may perhaps be approximately shown by the initial R found at its side, and bearing a certain resemblance to the letters of the Elizabethan, or of a somewhat earlier style. In printed books of the beginning of the sixteenth century, letters of similar character are to be found, as we see in the *Hand-Book of Mediæval Alphabets*, by Mr. Henry Shaw, Plates 17, 19. The like peculiar fashion may be also seen in letters from Salisbury Cathedral, dated 1554, and figured in that useful Manual; and it is shown, slightly varied, in a remarkable inscription of earlier date, namely, the original foundation-stone of Wolsey's College at Ipswich. That memorial, bearing the date 1528, is now preserved at the Chapter-house of Christ Church, Oxford.¹

One more of the peculiar and primitive sun-dials to which I have been desirous to invite attention, remains to be noticed. Its existence came under my observation very recently, some years after I had examined the specimens that have been described, and prepared the drawings from which the wood-cuts that accompany this memoir have been executed. The dial in question (fig. V.) is to be found in the graveyard of the old church of Saul, co. Down, which is

¹ *Memorials of Oxford*, by Dr. Ingram, vol. i. p. 63.

perched on the summit of a knoll, near the little village of Raholt, the spot where, according to tradition, St. Patrick first landed in Ireland on his transit from Scotland. This is now an inland hamlet at the extremity of a long, narrow slip of alluvial land, from which the sea is at the present time kept back by an artificial embankment. This dial, here figured, is carved on a head-stone measuring about 19 inches in breadth. The length of the slab may origin-

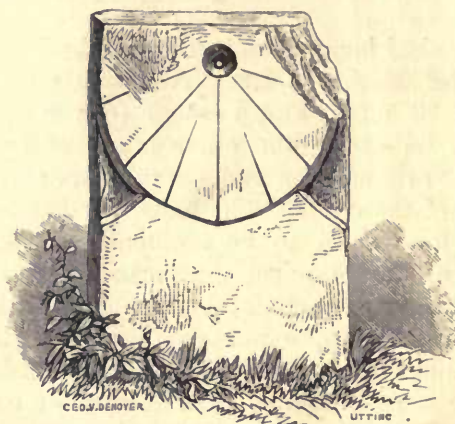


Fig. V.—Dial near the old church of Saul, co. Down.

ally have been considerably greater than at the present time. It will be observed that the space on which the dial is formed is not semicircular, as in the other examples before described, but escutcheon-shaped; the radiating lines have suffered considerable injury, and that for the hour of 6 A.M. is wanting."

Very shortly after we received from our talented friend, then resident at Antrim, and engaged on the important work of the Geological Survey in Ireland, the particulars last stated, accompanied by drawings of the dial that he had found near the village of Raholt, on August 18th in the last year, the sad intelligence of his untimely decease through a sudden attack of fever reached us. It is with painful interest that we place before our readers these last contributions of so valued and intelligent a coadjutor; the peculiar skill and facility with which he delineated relics of antiquity are well known to us through the admirable Pictorial Catalogue

of the Museum of the Royal Irish Academy, that attracted so much attention in the Museum formed during the Meeting of the Institute at Edinburgh, and also on other occasions.

In concluding these notices of ancient horological appliances, a singular object of stone, found in 1816 in ploughing within an entrenchment near Cleobury Mortimer, Herefordshire, claims consideration. The spot is near an old road leading to Clee Hill and Ludlow, and about four miles from Titterstone. The relic in question was exhibited at the meeting of the Cambrian Archæological Association at Hereford in 1867, and by their courtesy we are permitted to place before our readers the accompanying illustration, given in their Journal with a short memoir by the Rev. Dr. Wilson.²

This object, of coarse sandstone, is flat on one side and convex on the other; the dimensions are $3\frac{1}{2}$ in. by about $3\frac{1}{4}$ in.; the thickness about $1\frac{5}{8}$ in. It will be seen that it is perforated by a hole cut with considerable regularity, from which, on both sides, lines are drawn radiating towards the circumference. There are also seven perforations of smaller dimensions, apparently intended to be equidistant; and towards these some of the radiating lines appear to be drawn; an eighth possibly existed in a part of the stone that has been broken off. There is, moreover, a perforation passing through the thickness of the stone transversely, possibly adapted for some purpose of suspension; of this hole, one termination only on the right hand edge of the stone is shown in the woodcut. Two rudely fashioned stone whorls, the "fairly mill-stones" or "pixy grind-stones" of some localities, possibly to be regarded as fastenings of dress rather than, as frequently supposed, the *verticilla* of the spindle used in spinning, were found at the same time in the encampment before noticed.³

No satisfactory suggestion had been offered in regard to the intention of the larger of these stone relics, namely, that first described. It was conjectured that it might have been worn as an ornament of the neck suspended by a thong or cord that passed through the transverse aperture, and that such

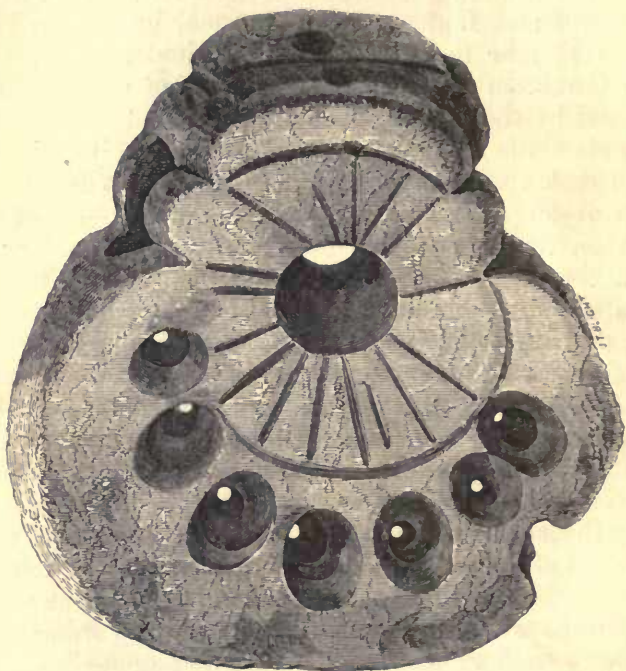
² Archæologia Cambrensis, third series, vol. xiv. p. 446.

³ One of these whorls, diam. about $1\frac{1}{2}$ in., is figured *ibid.*, p. 447. See some

remarks on the whorls so frequently found on sites of early occupation in this Journal, vol. xxiv. p. 249; Archæologia Cambrensis, *ut supra*, p. 413.

appendages as the smaller relics, resembling rudely fashioned beads, might be attached to the lesser perforations.⁴

Our lamented friend, Du Noyer, very shortly before his death suggested that this singular relic might have been a portable sun-dial. In a communication that he addressed to the Cambrian Archæological Association, he states his opinion that its date cannot be later than the twelfth cen-



Ancient relic of stone found in an encampment in Herefordshire. Greatest diameter $3\frac{1}{2}$ inches. In possession of E. Whitcombe, Esq., Cleobury Mortimer.

tury, and that it was intended to denote the seven canonical hours, namely, Matins, 6 A.M.; Lauds, 8 A.M.; Nones, 9 A.M.; Prime, Noon; Compline, 2 P.M.; Tierce, 3 P.M.; and Vespers, 6 P.M. Of the mode of use he gives the following explanation: ⁵—"The gnomon was a short conical piece of wood fitting into the central orifice. Let us suppose the gnomon

⁴ A drawing of a somewhat similar relic, of soft sandstone, has been sent to us by Mrs. Stackhouse Acton, of Acton Scott, Church Stretton. It is a flat pear-shaped object, measuring nearly 3 in. by 2 in., thickness 1 in.; it has a central

perforation, diameter nearly three quarters of an inch, and five smaller holes around the broader portion of the edge of the stone. There are, however, no radiating lines.

⁵ Archæologia Cambrensis, third series, vol. xv. p. 87.

to be inserted in its proper position ; if the instrument were then allowed to hang from the string passed through the transverse orifice at the narrow end, a short plummet attached to the base of the gnomon would enable the operator to cause the central line of the dial to be vertical, and, therefore, in a position to catch the shadow thrown by the sun at twelve o'clock. If the dial were used horizontally the central line just alluded to would, of course, represent the meridian, in which direction it should be placed to catch the shadow thrown at twelve o'clock ; and then the shorter transverse lines at right angles to it would point due east and west, and mark the hours of 6 A.M. and 6 P.M. Each half of the circle is seen to be divided by radiating lines into four principal spaces ; an intermediate extra scratch on the west side, and a double line on the east at the six o'clock mark, being, I think, of no account in the true subdivision of the dial into eight spaces. That such was the true significance of the lines radiating over the northern half of the dial, or between the meridian line and that striking east and west, is established by the presence of the seven small holes counter sunk and drilled through the stone around the outer periphery of the circle, and directly opposite the termination of each of the radiating lines. I believe that the extra scratches on the southern end of the dial are possibly mere ornamentation, to fill up a vacant and supposed unsightly space, as, with the exception of the prolonged meridian line, they do not radiate from the common centre at the gnomon orifice ; these lines, however, may have a significance the true explanation of which we cannot now arrive at."⁶

It is probable that the reader may feel, as I have done, some hesitation in accepting this ingenious suggestion offered, in default of any probable explanation of the object found in Herefordshire. I must, however, observe, that I am indebted to the Rev. Richard Gordon, of Elsfield, for accurate drawings of both sides of the relic in question, and that the reverse presents a circle with radiating lines of greater regularity than those traced on the face here figured ; more conformable also to the disposition of hour-lines on the examples to which our attention has been called by Mr. Du Noyer.

ALBERT WAY.

⁶ The letter, from which ^an extract is here given, was dated from Antrim, 5 Dec., 1868.

CONTRIBUTIONS TOWARDS THE HISTORY OF MEDÆVAL
ARMOUR AND WEAPONS IN EUROPE.

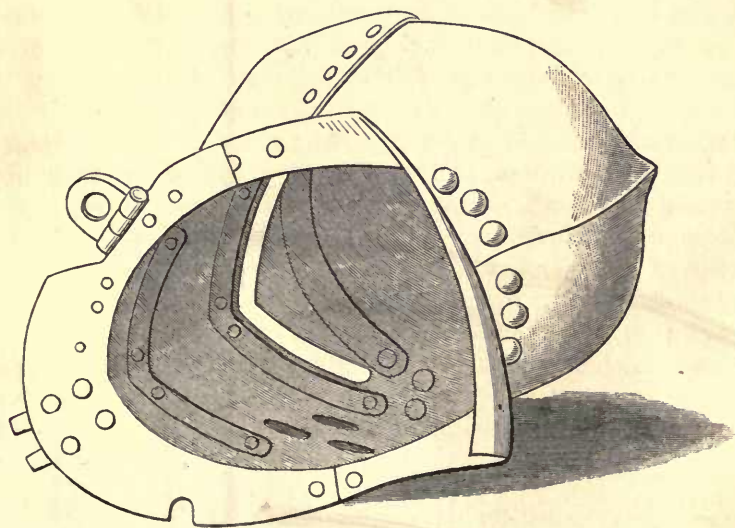
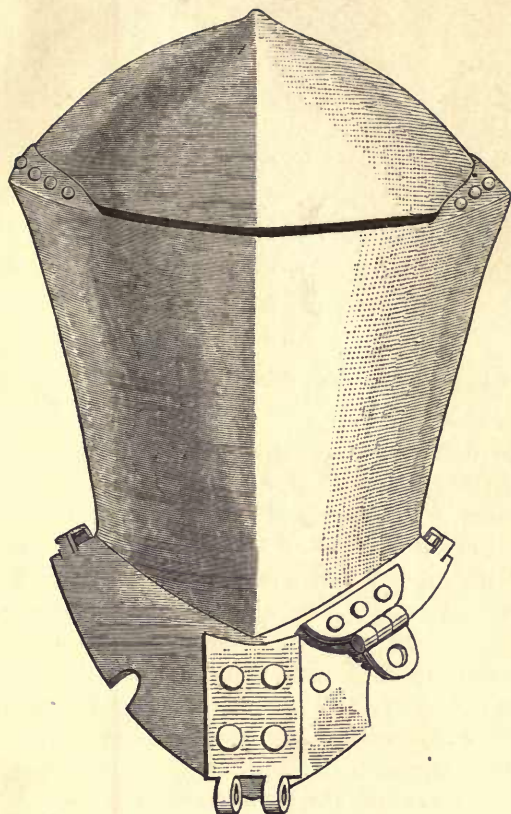
By JOHN HEWITT.

TILTING HELM FOUND IN THE TRIFORM OF WESTMINSTER
ABBEY.

THE fine example of a tilting helm here engraved was exhibited by the Dean of Westminster at the meeting of the Archæological Institute in February, 1869; having been recently found in a bay of the Triform of Westminster Abbey. How long it had lain there, or whence it came, has not been ascertained. The date of the relic appears to be about 1500, a time commonly known as "the Maximilian period." The most striking feature of this helm is the arrangement for breathing, which consists of three large apertures on the right side, each an inch and a quarter across. On the left side, as usual in the tilting helm, there is no opening. In front are the remains of a hinge, to which was probably affixed a bar for locking to the breastplate, as seen in the example figured at p. 60 of the 21st vol. of this Journal. At the back is an iron loop for the passage of a strap, to attach that part to the backplate. On each side is a staple, to brace the helm to the shoulder. The outcut portion on the right probably admitted a boss of the breastplate. The purpose of the hinged eyelet on the left is not so easy to assign: it may have helped to carry the *manteau d'armes*. On the crown appear the holes for fixing the ornament of the helm, whatever that may have been. These ornaments, at the period in question, were various. Sometimes it was the crest with wreath¹ and mantling; sometimes an elaborate plume of feathers: in the tournament roll of Henry VIII. the kerchief of Pleasance is worn by several of the knights; and on another occasion, Hall tells

¹ The wreath of the helm on the Peché monument at Lullingstone, Kent, is formed of the leaves and fruit of the

peach, in allusion to the name of the knight. See Stothard's Monumental Effigies.



Tilting Helm found in Westminster Abbey. Date about A.D. 1500.







Le Heaulme du Roy. From the Tournament Roll of Henry VIII. in the Herald's College.

us, "the Kyng had on his hed a Ladies Sleeve full of Diamondes." In Maximilian's Triumph some of the justers wear nothing but a circlet of laurel leaves, the so-called "crown of honour."

By traces of gold on the helm before us we are able to make out that a gilt border of $1\frac{1}{2}$ inch in depth adorned the upper edge of the front piece. Portions of the original lining are yet to be found. They are of leather, and the manner of fastening this lining is very clearly seen. Two iron bands, it will be observed, cross the inside of the face-guard, while a third appears just above the ocularium. It was by these that the lining was held in its place, each band being fixed to the body of the helm by rivets. The height of the casque, from the shoulder where the staple is, to the top, is about 13 in. : the weight is 17 lb. 12 oz.

The mounted figure with the crowned Helm is from the Tournament Roll of Henry VIII. preserved in the Heralds' College. It is entitled "*Le heaulme du Roy.*" The body of the casque is silvered : the ornaments represent pearls, rubies, sapphires, &c. Most of the body-armours of the knights justers are also silvered ; and this silvering does not appear to be merely a rich mode of indicating "white armour," for the engraved suit of Henry VIII. in the Tower has actually been plated throughout. The process was this : the whole surface was very finely hatched, then silver was beaten in, and the designs were made by the graver ploughing through the silver down to the steel beneath. The lines were probably filled with a dark paste. The esquire who carries the king's helm wears a rich collar, painted to imitate gems : the bridle and the poitrail are hung with bells : the ball on the crupper is a gold Pomegranate.

This fine roll has never been adequately engraved. There is a much-reduced print of it in the first volume of the *Vetusta Monumenta* ; one of the led horses, called "*Les Selles darmes,*" is given in *Shaw's Dress and Decorations* ; "*Les Roy desarmez*" (a civil costume) is figured in *Dallaway's Heraldic Inquiries* ; and two engravings of the king tilting and a group of eight "*Venantz*" appear in the third volume of *Ancient Armour and Weapons of Europe*.

Every one who has exhibited an old tilting helm has been met by two questions :—

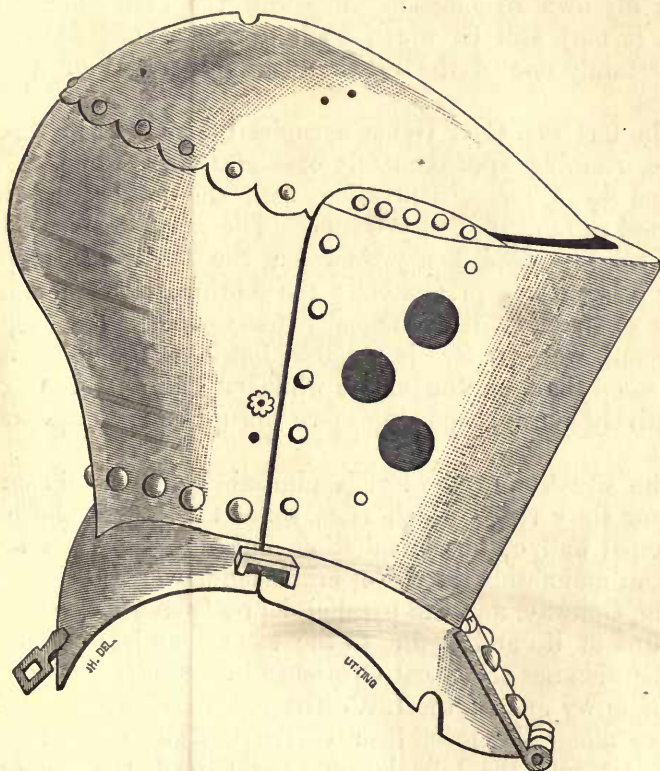
"You don't suppose they ever wore such things?"

“How could they see?”

Well, they *didn't* always see. On one occasion Henry VIII. (“Noble Cœur Loyal,” as he sarcastically calls himself in the Tourney Roll) had devised a new kind of justing suit, and the Duke of Suffolk was engaged to try a course with him to test its efficacy. The duke’s helm appears to have been like the one before us, and he had got his head so embarrassed within it that he was unable to see. At this juncture the king started for the onset, and, curiously enough, he forgot to close his visor, dashing forward with open face. Being told that the king was advancing, the duke couched his lance as best he might and spurred gallantly onward. Cries of affright were raised on all sides, but to no purpose in the clatter of horses and harness. Crash went the duke’s spear into the open visor, splinters flew in all directions, and renewed cries of horror were heard around. All thought the king was killed. But unluckily he wasn’t. The under-coif had received the blow and the monarch escaped.

Hall the chronicler, in his quaint and graphic way, thus tells the story:—“The x. day of Marche (1524) the kyng havynge a newe harnes made of his own devise and fashion, suche as no armorer before that tyme had seen, thought to assaye the same at the tylte, and appointed a justes to serve him. The kyng came to one end of the tylte and the Duke of Suffolke to the other. Then a gentleman sayd to the Duke, sir, the kyng is come to the tyltes ende. I see him not, sayd the Duke, on my fayth, for my headpiece taketh from me my sight. With these wordes the kyng had his spere delivred him, the visor of his headpiece beyng up and not doune nor fastened, so that his face was clene naked. Then the gentleman sayd to the Duke, sir, the king commeth. Then the Duke set forward and charged his spere, and the kyng likewise unadvisedly set toward y^e duke. The people perceivynge the kynges face bare, cryed hold, hold: the duke neither saw nor heard, and whether the kyng remembred that his visor was up or no, few could tell. Alas what sorrow was it to the people when they saw the spleters of the duke’s spere strike on the kynges hedpiece: For of a suretie the duke strake the kyng on the brow right under the defence of the hedpiece on the very coiffe scull or basenetpece, whereunto the barbett for power and defence is

charnelled, to whiche coyffe or bassenet never armorer taketh hede, for it is evermore covered with the viser, barbet and volant pece, and so that pece is so defended that it forseth of no charge. But when y^e spere on that place lighted, it was great ieopardy of death, insomuch that the face was bare, for the dukes spere brake all to shyvers and bare the kynges viser or barbet so farre backe by the countre buffe that all the kynges headpece was full of spleters. The duke incontynently unarmed him and came to the kyng, shewyng him the closenes of his sight, and sware that he would never runne against the kyng more. But the kyng sayd that none was to blame but himself." (p. 674, ed. 1809.)



Tilting Helm found in Westminster Abbey. Date about A.D. 1500.

PEN CAER HELEN, CARNARVONSHIRE.

By T. G. BONNEY, M.A., Fellow and Tutor of St. John's College, Cambridge.

ON the left bank of the river Conway, about seven miles above the town of the same name and in the parish of Llanbedr, is a remarkable hill fort which has already attracted some notice, and has been described by Mr. Blight in the *Archæologia Cambrensis* for July, 1867.¹ As, however, the plan which he there gives does not very nearly correspond with my own recollections and with the plan which I possess, it may still be worth while to give a brief description of certainly one of the most remarkable relics of Ancient Wales.

The fort Pen Caer Helen occupies the summit of a rocky ridge, running approximately east and west, which is connected by a *col* or depression with the loftier and more pointed summit of Pen-y-Gader. The north-eastern face of this ridge—called Pen-y-Gaer on the Ordnance map—is very broken and precipitous; the south-eastern, though not quite so steep, is also practically inaccessible. The slope of the south-western face is variable, but is on the whole much less steep than on the north, while on the west it is comparatively gentle, becoming more abrupt as it trends northward.

The situation of the fort is admirably chosen. From the narrow slaty ridge which rises some thirty feet above the principal wall of circumvallation, one now looks northward over an undulating district of arable land, over the rich valley of the Conway, and the parallel depressions occupied by the streams of Ro and Gyffin, to the estuary and the open sea. In the distance the Great Ormeshead rises beyond the ridges of Diganwy and of the Little Orme. Turning eastward we glance along the level floor of the Conway valley towards Llanrwst, into the hills beyond the Clwyd, rising over the

¹ *Archæol. Camb.*, vol. xiii., Third Series, p. 276. Pennant visited the fortress, and notices the singular defences,

or "chevaux de frize." *Tour in Wales*, vol. ii. p. 322.

further bank of that river. To the south and south-west is a dark mass of mountains, chief of which is Carnedd Llewelyn, towering above a gloomy combe; to the west and north-west lie the bare slopes of Y-Foel-Fras and the bleak valley leading to Bwlch-y-Ddenfaen.

The defences of this strong and commanding natural position also show remarkable skill. They consist of a single wall of circumvallation, running along the edge of the precipices on the eastern half of the hill, with elaborate outworks to protect the more accessible parts. These outworks vary according to the nature of the ground. The slope of the north-western side being, as has been said, still steep, a slight outer wall, running along some distance below the main *enceinte*, has been judged a sufficient defence. This outwork gradually approaches the latter as it proceeds eastward, but the exact point of junction has been obscured by a modern wall (see plan), which, however, may very probably follow the ancient line. The outwork on the west abuts on a mass of buildings (*a*) to be hereafter described. Passing these we find ourselves opposite to the main entrance (which looks west, in the direction of the least slope). This is very elaborately defended. Approaching from the west, we find a low, natural ridge or scarp of rock, forming a slight step on the hillside. This leads to a gently sloping plateau, perhaps fifty feet across, which is bounded on the right by the end of a steep rocky projection, in the line of the main ridge. The plateau narrows towards the north-west until the bounding scarp is lost in the steep hillside. This plateau is thickly studded with upright stones, varying in height from about $2\frac{1}{2}$ feet to a few inches, the smaller being very sharp and pointed. I suspect that this form of the stockade is intentional. An assailant would be impeded by the larger stones, which are not quite broad enough to give any real cover, and while avoiding these would be tripped up, and in falling "staked" by the unnoticed stone "calthrops" so thickly set around them. The material is a splinterly slate which appears *in situ* in the ridge. The only part of the plateau which is not thus "staked" is a narrow belt just above the scarp, so that assailants, who did not choose to charge through the stockade, were obliged to pass round it.² From

² Mr. Blight gives a view of one these remarkable stockades, which serve, as he observes, as outworks to the two approaches. *Archæol. Camb.*, vol. xiii., Third Series, p. 278.

the rocky spur just named a bank runs along, above the stockaded plateau, as far as the scarp. The path, after rounding this plateau, turns sharply back and runs below this bank towards the spur for some distance, until it reaches an entrance, by which it gains a second somewhat level space. To the right and left of the path are low walls, the former connected with the spur, the latter with a projection from the buildings already mentioned. This space terminates by rising into a bank or scarp about ten feet high, up which the path ascends diagonally. Another step is now reached, on the lower part of which are the buildings, and then the ground rises rapidly towards the main wall; the path turns to the right and mounts diagonally towards the principal entrance of the fort. On each side of this the wall, which is throughout of dry masonry, now much ruined, widens out so as to form two rudimentary bastions or gateway towers, which rise to a height of about a dozen feet, and appears to be provided with banquettes part way up the outer slope, on which probably defenders would be posted, under the protection of a stockade or breastwork, some traces of which may still be discerned. As usual, the passage between the walls does not look along the approach, but makes a considerable angle with it; so that the rush of an attacking party would necessarily be checked at the gate. The southern bastion rests upon the above-named rocky spur, which is naturally rather difficult of access, and probably was further protected by stockades or by other defences, of which the wall, mentioned above as on the right of the path, formed a part. Within the main wall, on each side of the principal gateway, are two ruined groups of small chambers, the northern (*b*) consisting of three, the southern (*c*) of two. The walls of the former—which are the more perfect—are still about three feet high, and the inmost chamber is so small that perhaps it may have been only a fireplace. It opens northward into the second chamber.

The group of buildings (*a*), already mentioned, on the outside, has walls of dry masonry four or five feet in height. As some of the smaller chambers are entered by doors only half that height, they must have served as sheepfolds, and may very likely be much more modern than the fort itself. Within the *enceinte* are several cyttiau or hut-circles, as shown in the plan, sheltered between it and the rocky

crest. The other entrance is in the south-western face. This, although not very far from the main one, being on the southern side of the rocky prolongation of the main ridge, practically gives approach from the southern slopes, as the other does from the northern and western. Here also we find an elaborate system of defences, consisting of another stone stockade, bounded on the upper side by a slight wall or mound. This is merely the outer lip of a ditch, which is cut in the shelving hillside; consequently, the opposite or inner side, above which is a low wall, forms a formidable barrier. Passing through this, we cross diagonally a sort of banquette, and then reach the entrance in the main wall. Mr. Blight's plan has a ditch bounding the outside of the stone stockade, which does not appear in the annexed plan. As our time was running short when we were at this part of our work, it is very probable that I omitted to mark it; indeed, I seem to remember that a slight scarp bounded the stockade, resembling that which I have described at the other group, to which, however, I should not apply the term ditch. He does not prolong the second stockade so far to the west as in our plan. Here also, for the above reasons, it is possible that we may have gone wrong. The principal difference between our plans is in the form of the main *enceinte*, and here I think he must be in error. The one which I give corresponds much more nearly with my recollections. I am indebted for it to my brother, Mr. W. A. Bonney, C.E., who carefully surveyed and plotted the principal enclosure, while I made sketches, notes, and sketch-plans of various details. I cannot vouch for the perfect accuracy of every minute point in the approaches to the western gate, though I think that I may for the general; their very complex nature, which I have already endeavoured to describe, rendering it most difficult for me to make a sketch-plan of them, and want of time preventing me from placing them in my brother's more skilful hands. Our difficulties were increased by the wind, which at times blew a violent gale. Still, although this description possibly leaves much to be desired, and may perhaps be corrected by future observers, it may be worth publication, as being more elaborate than Mr. Blight's plan. This, however, shews two circles near together, about seventy yards from, and almost due north of, the main entrance: these I did not observe.

One is naturally led to compare Pen Caer Helen with the Firlbolg fortress of Dun Ængus in the Isle of Aran, in Ireland, described by Professor C. C. Babington in the *Archæologia Cambrensis* for January, 1858;³ that, however, is in all respects on a much more gigantic scale. Still those who carefully examine the remains of Pen Caer Helen will feel no little respect for the ability of its builders. Probably it was not so much intended for a permanent abode as for an occasional camp of refuge, and commonly would be only tenanted by a small band of sentinels. Such was, I believe, the use of many of the more commanding hill fortresses in Wales, Herefordshire, Wiltshire, and indeed in most parts of England; in not a few cases, as at Martinsell, near Marlborough, the camp near Everley, Wilts, Pen-y-Dinas, near Barmouth, &c., distinct traces of the adjacent village may be seen on lower and less exposed sites. Such was the use of the *Refugia* of the ancient Helvetii, which remarkably resemble some of our slighter British earthworks, and have been lately described by Dr. Keller.⁴ The abundance of cairns, meinihirion, and other remains over all the district of Carnarvonshire, between the Carnedd Llewelyn chain and the sea, would lead us to suppose that Pen Caer Helen may have been one of a system of defences, among which were the forts on Penmaen Mawr and on the Conway mountain, perhaps also those on Diganwy and the Great Ormeshead.⁵ The age of this fortress is mere guesswork, but the presence of a Roman camp at Caerhun in the valley below would lead us to suspect that, as for instance at Caer Sws, the site of the station was determined by the neighbourhood of the fort; and consequently that the latter was the older. Mr. Blight is also inclined to assign a very early date to Pen Caer Helen, suggesting that perhaps it should be attributed to the Gael rather than to the Cymry. This question I must leave for decision to judges more competent than myself.

³ *Archæol. Camb.*, vol. iv., Third Series, p. 96.

⁴ *Mittheilungen der Antiqu. Gesells.* in Zurich, xvi. 2, 3.

⁵ An examination of the Ordnance map

of Wales will, I think, also show that these and the numerous other forts in the country commonly guard either the accesses to the hills or extensive upland pastures.

Original Documents.

THE FORMAL DECREE OF DIVORCE OF SIR JOHN STANLEY, OF HONFORD, AND MARGARET HIS WIFE; DATED JUNE 25, 1528.

From the Muniments of the Dean and Chapter of Westminster.

WE were recently enabled, by the courteous permission of the Dean and Chapter of Westminster, to bring before our readers the will of Sir John Stanley, of Honford, made on the occasion of his becoming a monk professed of the Abbey and Convent of Westminster, printed in extenso. The following is an authentic copy of the ceremonial of the formal separation, or "divorce a thoro," of Sir John and his wife, the Lady Margaret Stanley, in the due form of law upon that occasion. The ceremony took place on 25th June, 1528, in the sacristy or "revestry" of St. Paul's, on the south side of that cathedral, in the presence of William Benett, L.D., acting under the commission and authority of the Cardinal Presbyter, Archbishop of York, Primate and Chancellor of England and Legate a latere of the Apostolical See (Clement VII.), who was authorised to take the examinations of Sir John and his wife on the subject of their separation then contemplated.

The two parties appeared before the commissary, and a libel or petition was presented stating their intention and desire, of which the tenor is set out at length, followed by the oral statement, in English, of Sir John himself and also of the Lady Stanley, signed respectively by themselves, as of the above date.

The formal sentence or decree of Dr. Benett is there set forth verbatim, stating the voluntary separation or divorce "*ob religionis ingressum.*" It is followed by a notarial attestation of the instrument and a recital of the witnesses present at the Act. Such is a short summary of this record. A few observations on this ceremony may not be out of place.

Instruments of this kind, being of the nature of other like proceedings in the Ecclesiastical Courts, will not be found among the pleadings of the secular Courts, and they are not, so far as I am aware, to be met with in our law reports, or the formularies of our ordinary courts. It is, therefore, desirable to print it as a specimen of a very late date, shortly before the profession of a monk became disused in England.

The process, however, is one of very early occurrence of our ecclesiastical history. "*Si vir et uxor pro religiosâ vitâ divortere inter se consenserint, nullatenus sine conscientia episcopi fiat.*" Concil. Rom. Cap. Leon. IV. anno 853.

The formularies of Marculphus contain reference to a similar divorce on the like ground. Canciani Leg. Antiq., vol. ii. p. 238.

The Constitutions of St. Edmund of Canterbury, A.D. 1236, sect. 31, 32, recognize the divorce by reason of "*transitus ad religionem,*" and enjoin great circumspection in the admission of this cause of separation except by consent of both parties, and by special licence of episcopal authority only. Among very much later authorities, we find in the edition of Durandus de Mailles (ed. Lyon, 1776) that very curious, and not very edifying, questions might arise as to the relative state of things between the affianced, or married, couple, which might make such formal separation expedient, necessary, or admissible; but on this I have said enough.

I need not add that such divorce is under no circumstances a divorce "*a vinculo,*" but "*a thoro*" only.

E. S.

UNIVERSIS SANCTE matris ecclesie filiis ad quos litere nostre testimoniales sive hoc presens publicum instrumentum pervenerint sive pervenerit, et quos infrascripta tangunt seu tangere poterunt quomodo libet in futurum, Willelmus Benett, legum doctor, in ecclesia Cathedrali Divi Pauli London' canonicus prebendatus, Reverendissimi in Christo patris et domini, domini Thome, miseratione divina tituli sancte Cecilie sacrosancte Romane ecclesie presbiteri Cardinalis, Eboracensis Archiepiscopi, Anglie Primatis et Cancellarii, ac Apostolice sedis etiam de latere Legati, audientie causarum et negotiorum alter Auditor in causa et causis infrascriptis, ac inter partes subscriptas Commissarius sive Judex delegatus sufficienter legitime ac specialiter deputatus, salutem in Auctore salutis ac fidem indubiam presentibus adhibere. Ad Universitatis vestre noticiam deducimus et deduci volumus per presentes quod xxv^{to} die mensis Junii, anno domini millesimo quingentesimo xxvij^{to}. indictione prima, pontificatus sanctissimi in Christo patris et domini nostri domini Clementis, divina providencia hujus nominis Pape septimi, anno quinto, coram nobis in domo sive sacristia vocata the Revestrye of Powlys, ex parte australi chori ejusdem ecclesie notorie situata, in notarii publici subscripti ac testium infrascriptorum presentiis, quarundam literarum commissionalium dicti reverendissimi patris nobis factarum et directarum ac sigillo ipsius sigillatarum, et nobis realiter presentatarum, ac in presencia nostra perlectarum, onus in nos cum ea, qua decuit, reverencia ob honorem dicti reverendissimi patris committentis assumpsimus, ac juxta vim, formam, effectum et tenorem earundem procedendum fore decrevimus, quarum quidem literarum commissionalium tenor sequitur, et est talis.

Thomas, miseratione divina tituli Sancte Cecilie Sacrosancte Romane ecclesie presbiter Cardinalis, Eboracensis Archiepiscopus, Anglie Primas et Cancellarius, ac Apostolice sedis etiam de latere Legatus, dilecto nobis in Christo Magistro Willielmo Benett, legum doctori, in ecclesia Cathedrali divi Pauli London' canonico prebendato, nostre audientie causarum et negociorum auditorum uni, salutem, gratiam et benedictionem. Cum, ut fidedigno accepimus testimonio, dilecti nobis in Christo Johannes Stanley miles, et domina Margareta Stanley, vir et uxor, verique et legitimi ac indubitati conjuges, ex certis, veris, justis, legitimis et rationabilibus causis eos et eorum utrumque ad id specialiter vicissim moventibus, hujus mundi pompis et vanitatibus, carnisque illecebris ac ceteris mundi deliciis renunciare, ac votum professionis regularis legitime et canonice emittere, juraque et obsequia conjugalium ad invicem remittere, relaxare et dissolvere, ac se ab eisdem juribus et obsequiis conjugalibus mutuo et unanimiter ac concorditer absolvere et liberare, licentiamque ingrediendi religionem approbatum et monasterium quodcumque aptum et idoneum adinvicem tribuere a diu deliberaverunt et decreverunt, ac summo opere affectarunt et affectant, in presenti modo eorum desideriis in ea parte annuere vellemus. Quare nobis humiliter supplicari fecerunt hujusmodi propositum eorum approbare, ratificare et confirmare, ac alias et aliter animarum eorundem saluti prospicere dignaremur. Nos igitur, qui alias sumus multipliciter impediti, quominus dicti negotii expeditioni in persona nostra interesse valeamus, de tuis constantia, puritate et sana doctrina, ac circumspeditionis industria in hiis et aliis plurimum confidentes, ad examinandum vice et auctoritate nostris dictum Johannem et Dominam Margaretam super premissis; et si ipsos in hujusmodi volun-

tate perseverare, ac premissa non ex animi levitate sed spiritus integritate, digestoque et laudabili proposito procedere, nec aliud canonicum in ea parte obviare reperire poteris impedimentum, desideria eorundem admittere in premissis, votumque et promissionem eorundem in personam et pro utilitate ac commodo ecclesie Catholice recipiendi, admit-tendi, ratificandi, et comprobandi, ceteraque omnia alia et singula faciendi, gerendi, et expediendi, que in premissis aut circa ea necessaria fuerint seu quomodolibet oportuna, tibi vices nostras committimus, ac plenam in domino tenore presentium concedimus potestatem. Datum in edibus nostris apud Hampton Cowrte, xxij^o die mensis Junii, Anno Domini millesimo quingentesimo vicesimo octavo; dilectumque nobis in Christo Magistrum Ricardum Watkins, publicum sacra auctoritate apostolica notarium, in legibus baccallarium, in actorum nostrorum scribam in ea parte assumpsimus et recepimus. Ac deinde comparuerunt coram nobis tunc ibidem judicialiter et pro tribunali ad effectum infrascriptum seden-tibus in dicti notarii ac scribe nostri ac testium infrascriptorum presenciis, personaliter provide et circumspecte persone, Johannes Stanley, miles, Coventrensis et Lichfeldensis diocesis, ac Margareta Stanley, ejus uxor et conjux legitima ac indubitata, ut asseruerunt; atque tunc ibidem quendam libellum sive quendam summariam petitionem sive articulos in scriptis redactos dederunt, et eorum uterque dedit; cujus quidem libelli, summarie petitionis sive articulorum tenor sequitur, et est talis.

In Dei nomine. Amen. Coram vobis venerabili et egregio viro magistro Willelmo Benett, legum doctore, Reverendissimi in Christo patris et domini, domini Thome miseratione divina tituli sancte Cecilie sacrosancte Romane ecclesie presbiteri Cardinalis, Eboracensis archiepiscopi, Anglie primatis et Cancellarii, ac Apostolice sedis etiam de latere Legati, ejus que audientie causarum et negociorum auditorum uno, ac iudice et commissa-rio in infrascriptis, ac inter nos personas inferius descriptas specialiter, sufficienter et legitime deputato, Nos, Johannes Stanley miles, et domina Margareta Stanley, Coventrensis et Lichfeldensis Diocesis, vir et uxor, verique, legitimi ac indubitati conjuges, volentes iuribus et obsequiis conjugalibus adinvicem alter alteri remittere, ipsaque jura et obsequia adinvicem relaxare, et nos ab eisdem absolvere et liberare abinvicemque separari, ad effectum ut religionem approbatam et monasteria apta et idonea ingredi et intrare, ac inibi nos convertere, incorporare et profitere possimus, dicimus, proponimus, allegamus et suggerimus articulatim, prout sequitur. In primis, quod nos, memorati Johannes et Domina Margareta, fuimus et sumus vir et uxor, verique, legitimi ac indubitati conjuges, Coventrensis et Lichfeldensis Diocesis, Cantuariensisque provin-cie, vestreque jurisdictioni notorie subditi, ac pro talibus et ut tales communiter dicti, tenti, habiti, nominati et reputati palam, publice et notorie, et ponimus conjunctim divisim ac de quolibet. Item quod nos, iidem Johannes et Margareta, post multiplices hujus seculi delicias et periculosas voluptates, ad salutis portum pervenire volentes, pro Christi amore animarumque nostrarum salute, et quo liberius, ac quietius et tranquillius per residuum vite nostre Domino nostro Jhesu valeamus famulari, de renunciando hujus seculi pompis et vanitatibus, carnisque illecebris, ac ceteris mundi deliciis et voluptatibus, ac de remit-tendo adinvicem alter alteri jura et obsequia conjugalia quaecumque, ipsaque jura et obsequia adinvicem relaxando, et nos ab eisdem absolvendo et liberando, adinvicemque separari petendo, ac religionem approbatam

et monasteria apta et idonea ingrediendo et intrando, ac inibi nos convertendo, incorporando, et profitendo, a diu inter nos deliberavimus et sepius tractavimus diligenter et ponimus, ut supra. Item quod post premissa nos, Johannes et Margareta, non vi, metu vel dolo inducti, nec aliqua machinatione sinistra mediisve illicitis circumventi, sed ex nostris mera, pura, spontanea, simplici, et absoluta voluntatibus, ex spiritus integritate et sinceritate, animoque deliberato, provisoque ac perpeuso et digesto consilio, ac absque levitate animi quacumque, tandem de omnia et singula premissa facienda et expedienda inter nos unanimiter et concorditer decrevimus et conclusimus, adque eadem omnia et singula facienda et expedienda nos preparavimus ac preparamus in presenti, et ponimus, ut supra. Item quod volentes nostra desideria in premissis debitum et condecentem ac efficacem effectum, et expeditionem sortiri omni jure, titulo, interesse et clameo, quod alter in alterum habet, aut habere potuit vel potest, in et circa personas nostras, ac jura et obsequia conjugalia quecumque adinvicem unanimiter et concorditer renunciare, ac illud in manus reverendissimas reverendissimi in Christo patris et domini, domini Thome legati a Latere predicti, ac vestras manus venerabiles auctoritate dicti Reverendissimi patris, seu alterius cujuscumque sufficientem potestatem in ea parte habentis resignare, ac jura et obsequia conjugalia inter nos remittere, ac religionem approbatam et monasteria apta et idonea ingredi, et inibi nos convertere, incorporare, et profiteri volumus, prout etiam sic jam renunciamus, resignamus, remittimus, et vovemus, et ponimus, ut supra. Item quod ad sic renunciantium, resignandum, vovendum, religionemque et monasteria hujusmodi ingrediendum et intrandum ceteraque premissa expediendum et faciendum nullum nobis canonicum obviavit aut obviare potuit vel potest impedimentum, et ponimus, ut supra; item quod premissa omnia et singula fuerunt et sunt vera. Unde facta fide de premissis per nos dictis propositis, allegatis et suggestis, ad quam faciendum juxta juris exigenciam offerimus nos promptos et paratos, pro loco et tempore congruis et oportunis; et ad hoc petimus nos admitti; fuit et est quatenus premissa veritate fulciantur et nitantur, hujusmodi renunciatio, resignacio, et votum, ceteraque omnia et singula in hac parte per nos petita, proposita, allegata, et suggesta approbandum, admittendum, ratificandum et comprobandum, licenciaque nobis ad religionem et monasteria hujusmodi ingrediendi et intrandi, ac inibi nos convertendi, incorporandi, et profitendi, danda et concedenda, litereque testimoniales desuper fiende ac justicia nobis in premissis omnibus et singulis ministranda, ulteriusque facienda, statuenda et decernenda, ac declaranda per vos et vestrum in hac parte finale decretum quod juris fuerit et rationis. Que proponimus et fieri petimus omni via, modo et juris forma meliori qua possumus. Ad probationem superfluum in premissis nos non astringentes, sed officium vestrum reverendissimum humiliter in omnibus et singulis implorantes. Et allegarunt et petierunt, ac eorum uterque allegavit et petiit, prout ibidem continebatur. Et tunc ibidem incontinenti nos ad eorum et utriusque eorundem petitionem hujusmodi libellum, summariam petitionem seu articulos admisimus, et successive eundem libellum, summariam petitionem sive articulos, ad utriusque eorundem petitionem repetimus in vim positionum et articulorum, ac eorum utrumque super eisdem juramento eorum corporali onerari de mera veritate dicenda et examinari fecimus. Quibus positionibus omnibus et singulis per eosdem et eorum utrumque confessatis, dictus Johannes, in prenominate

domine Margarete Stanley ejus conjugis prediſte preſencia, ac de ejus expreſſa voluntate, conſenſu, et aſſenſu tunc ibidem expreſſe ad id adhibitis et intervenientibus, quandam renunciacionis ſive reſignacionis, necnon promiſſionis et voti emiſſionis ac dimiſſionis, et abſolutionis ac relaxacionis ſcedulam in ſcriptis in lingua noſtra vernacula redactam fecit, legit et interpoſuit, ceteraque geſſit et exercuit, prout in dicta ſcedula plenius continetur; cujus tenor ſequitur, et eſt talis.

“ In the name of Godd, Amen, before you the honorable Maſter William Benett, Doctour of Lawe and Chanon and Prebendary of the Cathedrall Church of Saynt Poule in London, and Auditor of the cauſes and buſynes in the Audience of the moſte Reverend fader in Godd, Thomas, by the mercy of Godd Almyghty Cardinall Preſte, Archbiſhopp of Yorke, Primate and Chauncellour of England, and Legat a Latere of the See thapoſtolique, in the cauſe and cauſes herunder wrytten, Commiſſary lawfully and ſpecially aſſigned and deputed, and before you, notarye publique and autentique perſon, and before you, lawfull and honeſt witnes here being preſent, I, John Stanley, Knyght of the Dioceſſe of Coventrie and Lichfeld, married man and husband of the Right Worſhipfull woman Dame Margaret Stanley, willing and coveyting for certeyn true, juſt, lawfull and reaſonable cauſes moving me and my mynde in this behalf, ſpeciallie and principallie for the love and honour of Godd, and the helth, quietnes, and tranquillitie of my ſoule and mynde, to renounce, forſake and relinquiſhe all and ſingler the pompys, vanities, pleaſures, and delectacions of this world and my ſaid wiff, and to departe utterlye for evermore from my ſaid wiff, hir bedd and company, with all ſuch rights and intereſt which I have in hir, and utterly to be diſmyſſed and abſolved from hir, and ſemblable to abſolve and releaſe her in all and ſinguler the premiſſes. And furthermore, to thend and effect I may the frelier, more quietly, and with a more tranquillitie the reſte of my lif ſerve Almyghtie God, to make a lauffull vowe to ſumme approved religion, and ſo to entre unto the ſame religion, and therewith ſubmytt myſelfe to the yook of obedience and obſervance of the ſame religion; induced to theſe by no maner compulſion, feare or diſceite, nor by any maner ſynſtre machinacion, or craffe circumvented or begyled, but only of myn owen mere, pure, free, ſimple and abſolute will, with a full and a deliberat purpoſe and will, tryed counſell and adviſe only, of the clerenes and integritie of my good mynd and ſoule, and not of any ſenſuall or light appetite of mynd, utterlie and hollie, by the expreſſe conſent and aſſent of the ſaid Dame Margarete my wiff, forſake and renounce all and all maner right, tittle, intereſt or clayme which in this preſent tyme have, myght or may have in the ſaid Dame Margaret my wiff before ſaid; and the ſame hollie do nowe unto the moost honorable hands of the moost Reverend Father in Godd, Lord Thomas, Archebiſhopp of York and Legat de Latere, and unto the hands of you, or any other perſone or perſons having power ſufficient to admytt this my reſignacion, reſigne, geve over, and from my ſaid wiff totallie and expreſſlie departe, in and by theſe writinges; and furthermore promys and avowe chaſtitie, and chaſtelie to leve perpetually from hensforth, during my lif naturall, after the rule and order of Saynt Benett, unto which religion I doo promiſſe to entre, and ther by Godds ayde and helpp of Godd ſhall profeſſe myſelfe and make my profeſſion according to thordinaunces regulars there. And, over this, of myn owen fre and liberall will and

mynde geve and graunte to the forsaide Dame Margaret my wiff, in as large and ample maner and form as I may or can, full power, authoritie, licence and libertie by thes presentes to entre into any lafull and approved religion and the Monastery thereof, and therein to dwell and professe herself, and make her profession in due fourme of lawe to observe the said religion. Also promys by thes presents never to make any clayme unto her, nor never to call her oute of the said Monastery and religion, but now in this present tyme releax and dismysse, delyver and acquite her for ever from all and singuler right, title or interest, which I have or may have in any maner wise in the same Dame Margaret my wif, by reason of the sacrament of matrimony, by the which she and I were in the face of the Churche lafully coupled together."

Et consequenter tunc ibidem prenominata Domina Margareta Stanley in prenarrati Johannis Stanley, militis, mariti sui predicti presencia, ac de ejus expressis voluntate, consensu et assensu, tunc ibidem expresse ad id adhibitis et attributis, quandam renunciationem sive resignationem, necnon promissionis et voti emissionem ac dimissionem, et absolutionis ac resignationis schedulam in scriptis in lingua nostra vernacula pariformiter redactam fecit, legit et interposuit, ac cetera gessit quemadmodum in dicta scedula continebatur; ejus tenor sequitur, et est talis.

"In the name of Godd, Amen, before you the Honorable Master William Benett, Doctour of Lawe, and Chanon and Prebendary of the Cathedrall Churche of St. Poule in London, and Auditor of the Causes and busynes in the Audience of the moost Reverend Father in Godd, Thomas, by the mercy of Godd Almyghti Cardinall Preste, Archebushopp of Yorke, Primat and Chancelour of England, and Legate a Latere of the See Apostolique, in the cause and causes herunder written commyssary lawfully and speeyallie assigned and deputed, and before you, notarie publique and auctentique persone, and before you, lawfull and honest witnes here being present, I, Dame Margaret Stanley, married wiff of the right worshipfull man, Sir John Stanley, Knyght, of the Diocese of Coventre and Lichfeld, willing and coveyting for certayn true, juste, lafull and reasonable causes moving me and my mynde in this behalf, speciallie and principallie for the love and honour of Godd, and the helth, quietnes and tranquillitie of my soul and mynde, to renounce, forsake and relinquishe all and singuler the pompys, vanyties, pleasours and delectations of this world, and my said husband, and to departe utterlie for evermore from my said husband, his bedd and company, with all suche rightes and interest which I have in hym, and utterly to be dismysed and absolved from hym; and semblable to absolve and releax hym in all and singuler the premysses; and furthermore, to thend and effect I may the frelier, more quietlie, and with a more tranquillitie the reste of my lif serve Almyghtie Godd, to make a lawfull vowe to summe approoved religion, and so to entre unto the same religion, and therewith submytt myself to the yoke of obedience and observance of the same religion; induced to this by no maner compulsion, feare or deceyte, nor by any maner synystre machination or crafte circumvented or begyled, but only of myne owen mere, pure, free, simple, and absolute will, with a full and a deliberat purpose and well tryed counsell and advise only of the clerenes and integritie of my good mynd and sowle, and not of any sensuall or light appetite of mynd, by the expresse consent and assent of the said Sir John Stanley, my husband, utterly and hollie forsake and

renownce all and all maner right, title, interest or clayme, whiche in this present tyme have, myght or may have, in the said Sir John Stanley, my husband ; and the same hollie doo nowe unto the moost honorable hands of the moost Reverend Father in Godd, Lord Thomas, Archebusshopp of Yorke, and Legate de Latere, and unto the handes of you or any oder person or persons having power sufficient to admitte this my resignation, resigne, geve over, and from my said husband totallie and expresselie departe, in and by thes writings. And furthermore promys and avowe chastitie, chastelie to lyve perpetuallie from hensforth during my life naturall, after the rule and ordre of Sainet Benett, unto which religion I doo promys to entre, and there by Gods ayde and helpe of Godd shall professe myselfe and make my profession according to thordinaunnces regulars there. And over this, of myn owen free and liberall will and mynd, geve and graunte to the forsaid Sir John Stanley, my husband, in as large and ample maner and fourme as I may or kau, full power, authoritie, licence and libertie, by thes presentes, to entre unto any lawfull and approved religione and the Monasterie thereof, and therein to dwell and professe hym selfe and make his profession in due fourme of lawe to observe the said religione. Also promys by thes presentes never to make any clayme unto hym, nor never to call hym oute of the said Monasterie and religione, but now in this present tyme releax and dismysse, delyver and acquitte hym for ever from all and singuler right, title or interest which I have, or may have, in any maner wise in the same Sir John Stanley my husband, by reason of the sacrament of Matrimony, by the which he and I were in the face of the Churchelaw fully coupled togeder."

Quibus scedulis per eosdem Johannem et Dominam Margaretam sic ut premittitur perlectis, prenominati Johannes et Domina Margareta respective et successive in manibus suis propriis hec verba, videlicet :—Redd by me, Sir John Stanley, Knyght, and subscribed with myn owne hand, the xxvth day of June, Anno Domini 1528,—Redd and subscribed by me, Dame Margaret Stanley, the yere and day above wrytten,—subscripserunt. Quibus factis, prenominati Johannes et Domina Margareta se nostris decreto et sentencie submiserunt, ac humiliter supplicarunt, et eorum uterque supplicavit et peciit, quatenus dictas renunciaciones, resignaciones, dimissiones, relaxaciones, absoluciones, promissiones, votorum et emissiones, ac cetera omnia et singula in eisdem scedulis et earum utraque contenta et specificata, in persona ac pro utilitate et commodo ecclesie Catholice recipere, ac easdem et omnia et singula in eisdem et earum utraque contenta, cetera que premissa per eosdem petita admittere, approbare et ratificare, necnon sentenciam diffinitivam, sive finale decretum in et super premissis ferri et promulgari, ceteraque peragere in hac parte necessaria seu oportuna dignaremur ; ad quorum petitionem :—

"Nos, prefatus Willelmus Benett, commissarius antedictus, auctoritate tam commissionis dicti reverendissimi patris suprascripti quam submissionis, supplicationis et petitionis vigore, quandam sentenciam diffinitivam, sive quoddam finale decretum tunc in scriptis tulimus et promulgavimus. Cujus quidem sentencie diffinitive seu decreti finalis tenor sequitur, et est talis. In Dei nomine, Amen. Auditis, visis et intellectis, ac plenarie discussis per nos, Willielmum Benett, legum doctorem, ecclesie Cathedralis divi Pauli Londoniensis Canoni-

cum et prebendatum, ac reverendissimi in Christo patris et domini, domini Thome, miseracione divina tituli sancte Cecilie sacrosancte Romane ecclesie presbiteri Cardinalis, Eboracensis Archiepiscopi, Anglie Primatis et Cancellarii, ac Apostolice sedis etiam a latere Legati, ejusque audiencie causarum et negociorum auditorum unum, ac ipsius reverendissimi patris in negotio infrascripto ac inter partes inferius nominatum commissarium et judicem specialiter, sufficienter, et legitime deputatum, meritis et circumstanciis ejusdam cause separacionis sive divorcii voluntaril ad effectum et ob religionis ingressum, que coram nobis Willielmo Benett Canonico, Auditore, et Commissario predicto ad promotionem, suggestionem, et instantem petitionem venerabilium personarum Johannis Stanley militis, Coventrensis et Lichfeldensis Diocesis, ac Domine Margarete Stanley, uxoris et conjugis dicti Johannis Stanley, militis vertebatur, vertitur, et pendet indecisa, rimato primitus et diligenter recensito toto et integro processu in dicta causa habito et facto, servatisque per nos in hac parte de jure servandis, prenominationis Johanne et Margareta in personis propriis coram nobis personaliter et judicialiter comparentibus ac sententiam et finale decretum petentibus et seipsos nostris sentencie et decreto hujusmodi submittentibus, ad nostre sentencie diffinitive sive finalis decreti prolacionem in hac parte ferendam, ex submissione et ad instantem petitionem parcium et personarum predictarum duximus procedendum et procedimus, in hunc modum. Quia per acta habita, allegata, confessata pariter et probata comperimus et luculenter invenimus suggesta, proposita et allegata in libello seu articulis ex parte dicti Johannis Stanley militis, et Domine Margarete Stanley, uxoris et conjugis predicti, contenta et deducta. Quorum quidem libelli seu articulorum tenor sequitur, et est talis. In Dei nomine. Amen, &c."

Quem libellum seu articulos pro hic lectum et insertum haberi volumus, et mandamus fuisse et esse vera ac sufficienter et legitime probata et confessata, ac nichil effectuale deductum, propositum, allegatum, probatum, aut confessatum quod petitionem et intentionem dicti domini Johannis Stanley et Domine Margarete antedictae in hujusmodi libello seu articulis contentum et factum impediret seu quomodolibet enervaret. Idcirco nos, Willelmus Benett, Canonicus, Auditor et Commissarius predicti, Christi nomine primitus invocato, ac solum Deum oculis nostris preponentes, de consilio jurisperitorum cum quibus communicavimus in hac parte, suggesta, proposita, allegata et narrata per eosdem Johannem et Margaretam in hujusmodi libello seu articulis, ad quem seu quos nos referimus in hac parte, et pro lectis et insertis haberi volumus et habemus, fuisse et esse vera ; ac ideo renunciaciones, resignationes, et vota eorundem, ac cetera omnia et singula per eosdem Johannem et Margaretam in hujusmodi libello seu articulis petita approbanda, admittenda et ratificanda fore, licenciam que eisdem Johanni et Margarete religionem quamcunque approbatam et monasterium quodecumque aptum et idoneum ingrediendi et intrandi, ac inibi se convertendi, incorporandi et profitendi, dandam et concedendam fore, literasque testimoniales desuper pro majori firmitate premissorum, ac quo libentius et citius ad religionem et monasterium hujusmodi recipi, assumi et admitti possent, fiendas fore pronunciamus, decernimus et declaramus, ac approbamus, admittimus, ratificamus, damus et concedimus, quantum de jure poterimus, per hanc nostram sententiam diffinitivam sive finale decretum, quam sane quod ferimus et promulgamus in hiis scriptis.

Quam quidem sententiam diffinitivam, seu finale decretum hujusmodi sic per nos latam et recitatam prenominati Johannes et Domina Margareta, et eorum uterque, vive vocis oraculo tunc ibidem approbarunt et approbavit, ratificarunt et ratificavit; et deinde dictus Johannes et Domina Margareta nos commissarium antedictum ex premissis omnibus et singulis literas testimoniales unas seu plures confici, ac subscriptione et signo dicti notarii scribe nostri hujusmodi subscribi, signari et publicari. In quam autenticam et publicam formam redigi, ac sigilli autentici appensione communiri decernere et facere dignemur. Ad quorum petitionem nos sic decrevimus, et in eorundem omnium et singulorum premissorum fidem et testimonium has presentes literas nostras testimoniales, sive hoc presens publicum Instrumentum per dictum magistrum Ricardum Watkins, notarium publicum et actorum nostrorum in hac parte scribam hujusmodi, scribi, subscribi et publicari, ac ipsius signo, subscriptione, nomine et cognomine solitis et consuetis signari, et sigilli audientie causarum dicti reverendissimi patris, quod in custodia et manibus nostris habemus, appensione fecimus et mandamus communiri.

Data et acta ac gesta fuerunt omnia et singula predicta, prout superscribuntur et recitantur, coram nobis et per nos Willielmum Benett, Auditorem et Commissarium predictum, Indictione, pontificatu, mense, die et loco predictis. Presentibus tunc ibidem in omnibus et singulis predictis venerabilibus et egregiis viris: Magistris Willielmo Styllington, Archidiacono Norwicensi, Johanne Olyver et Edmundo Bonere, legum doctoribus, ac discretis viris, Dominis Johanne Asshelyne et Johanne Andrews, Capellanis, Londoniis commorantibus, testibus ad premissa vocatis specialiter et rogatis.

Et ego, Ricardus Watkyns, Landavensis Diocesis clericus, publicus sacra autoritate apostolica notarius, in legibus bacalarius, atque in premissis actorum scriba per dictum dominum Commissarium et Judicem delegatum specialiter assumptus et deputatus. Quia premissis omnibus et singulis dum sic ut premittitur sub anno domini, Indictione, pontificatu, mensis die et loco predictis per dictum dominum Commissarium, ac per et inter partes predictas agebantur et fiebantur, una cum prenominatis testibus presens personaliter interfui eaque omnia et singula sic fieri vidi et audivi, et in notam sumpsit, ideo has presentes literas testimoniales in tribus pergameni peciis, manu aliena (me interim aliter occupato), fideliter scriptum exinde confeci, publicavi, et in hanc publicam et autenticam formam redegii, signoque et nomine ac cognomine meis solitis et consuetis una cum predicti sigilli appensione signavi, publicavi et subscripsi, ad mandatum dicti domini judicis et partium predictorum rogatum in fidem et testimonium omnium et singulorum premissorum. Et constat inde cancellatione duarum linearum in calce dicte summarie petitionis superius conscripte, quam approbo, et omni sinistra suspitione carere volo, ego notarius antedictus.

Proceedings at Meetings of the Royal Archaeological Institute.

May 1, 1868.

Mr. OCTAVIUS S. MORGAN, M.P. and V.P., in the Chair.

The second portion of Mr. G. T. Clark's Memoir "On Mediæval Military Architecture" was read. This has been printed in this Journal, vol. xxiv. p. 319. A discussion ensued, in which Mr. James Yates, Mr. Tregellas, and Dr. Rock took part.

Mr. C. D. E. FORTNUM, F.S.A., gave an account of a remarkable collection of objects of bronze from Upper Egypt exhibited by him. They were chiefly vessels used for the administration of the Holy Sacrament by the Coptic Christians of the church of St. Mark at Thebes, in the seventh century. These relics, which are here figured, were discovered among the ruins of a village inhabited by early Christians in the temple of Medcenet Haboo at Thebes, which was deserted by the Christians on the approach of the Arabs in the year 640, and had never since been inhabited. One chamber of the temple that had been thus turned into a village by the Copts was used as a church, the hieroglyphics on the walls were filled in with mud, and the building decorated with the cross and other sacred symbols. In the British Museum is a portion of a cross (apparently of gilded leather) supposed to have decorated a vestment or altar-cloth; it was obtained from the same locality, and was presented by Sir Gardner Wilkinson. This object, as Sir Gardner has had the kindness to inform us, was found by him in one of the side-chambers at the back part of the temple; it doubtless belonged to a Copt priest, and had been rolled up as if for concealment, or possibly to facilitate its being carried away by the priest in whose chamber it was found. Little was known of Medcenet Haboo until 1830, when some of the inner chambers were opened by Sir Gardner, and several others have been examined since that time. The structure consisted of two courts, and in the second of these the Coptic church was established, an apse being cut in the wall at the east side; beyond these courts there are numerous chambers of the old temple, and in one of these the cross was brought to light by Sir Gardner Wilkinson.

The bronze lamp, hereafter figured (see page 245), and brought by Mr. Fortnum with the objects from Thebes, was not found there. A lamp of similar type and character was found, however, at Medcenet Haboo, but it was unfortunately separated from the other objects and sold to a traveller, in whose hands it was seen by Mr. Fortnum. He exhibited also a pair of ear-rings of bronze, of elegant and simple form, here figured;

and four small silver armlets, probably intended to be worn by children. These, with a silver finger-ring likewise in his possession, and having engraved on its metal bezel the lion of St. Mark, were found among the ruins of the mud houses in Medeenet Haboo. An early Christian intaglio on nicolo, brought for exhibition with the relics from that site, but not found there, is probably of contemporary date or nearly so : it represents the lion of St. Mark surmounted by a Greek cross ; the silver setting is of a more recent period.

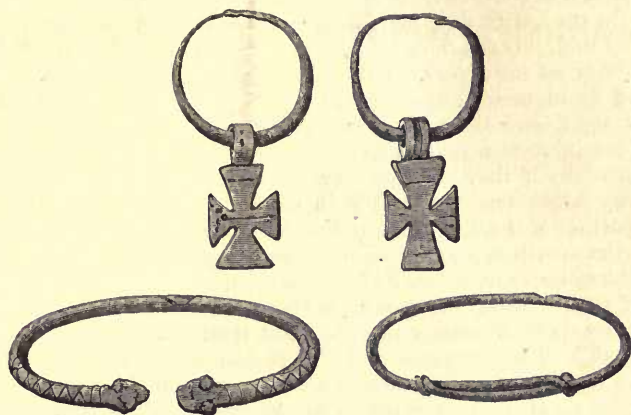


Fig. 1.—Personal ornaments of bronze and silver found at Thebes in Upper Egypt. Orig. size.

We are indebted to the friendly assistance of Canon Rock for the following observations on the remarkable Christian relics brought from Egypt by Mr. Fortnum.

"The bronze and silver objects exhibited by Mr. Fortnum are extremely curious no less than valuable, affording us specimens of female adornment and of liturgical appliances wrought at an early period of Christianity. As they were found in Egypt, we are surely warranted in taking them all to have been fashioned by believing hands and for believers' use in that illustrious portion of the early church.

"Writing toward the end of the second century, St. Clement of Alexandria teaches his flock, in his curious treatise 'The Pedagogue' (lib. iii. c. II.), to have the rings which they wore engraved not with images of idols and of utensils which contribute to sin or intemperance, but with a dove, a fish, a ship under sail, a lyre, or an anchor, &c. No wonder, then, that we find the drops on the ear-rings in form of the cross, or the bracelets showing at the ends the serpent's head, admonishing the wearer to be wise as serpents (see woodcuts, fig. 1).

"The liturgical appliances are, however, by far the most important and interesting portion of the collection. Fig. 2 represents a sort of pyx used, in the first ages, for carrying to the sick and dying the holy Eucharist under one kind ; its short legs show that it had been so made as to stand upon a table while in ritual service ; its lid, surmounted by a cross, indicates its ecclesiastical application ; its short spout will at once be accounted for by learning how the *Vaticum*—the *εφ᾽ὁδίου* spoken of in the first Council at Nice A.D. 325—or the holy communion given to the dying, in accordance

with the ritual followed of old in Egypt, and what is now known as the Coptic liturgy. In his Ecclesiastical History (book vi. c. 44), Eusebius has preserved a curious letter which Dionysius, bishop of Alexandria, A.D. 249, wrote to Fabius, bishop of Antioch, concerning the death of one of his people. In this epistle the Alexandrian prelate says :—"There was a certain Serapion, an aged believer, who had passed his long life irreproachably, but as he had sacrificed during the persecution (of Decius), though he had frequently begged, no one would listen to him. He was taken sick, and continued three days in succession speechless and senseless. On the fourth day, recovering a little, he called his grandchild to him, and said, "O son, how long do you keep me? I beseech you hasten, and quickly let me depart. Call one of the presbyters to me." Saying this, he again became speechless. The boy ran to the presbyter. But it was night, and the presbyter was sick. As I had, however, before issued an injunction that those at the point of death, if they desired it, and especially if they entreated for it before, should receive absolution that they might depart from life in comfortable hope, I gave the boy a small portion of the Eucharist, telling him to dip it in water and to drop it into the mouth of the old man. The boy went back with the morsel. When he came near, before he entered, Serapion, having again recovered himself said, "Thou hast come, my son, but the presbyter could not come; but do thou quickly perform what thou art commanded, and let me depart." The boy moistened it, and dropped it into the old man's mouth; and he, having swallowed a little, immediately expired."

"Being, as it were, thus drawn to the bedside of the dying Christian in Egypt, we behold how, at first sight, the liturgical vessel here shown us had been so wrought as to completely answer its purpose: the Eucha-

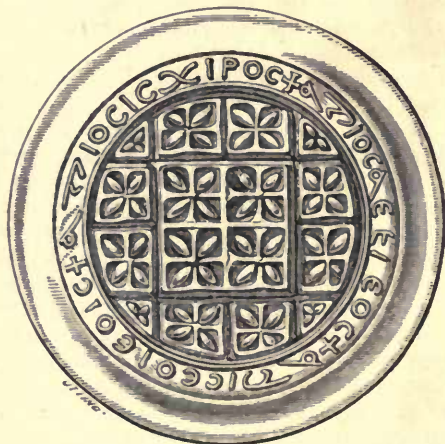


Fig. 3.—The "Corban," or Eucharistic bread, used in the Coptic rite. Diam. $3\frac{1}{4}$ inches.

ristic bread then as now, no doubt, was, as exhibited in fig. 3, round, thin, and flat. The small portion of it which the bishop Dionysius broke off, was but a morsel, a tiny particle, which could be with ease poured along with the water that had moistened it, into the mouth of the sick and dying person.



Fig. 4.—Bronze Cruet for the Eucharistic wine, and tripod stand.
Found at Thebes in Upper Egypt. Two thirds of orig. size.



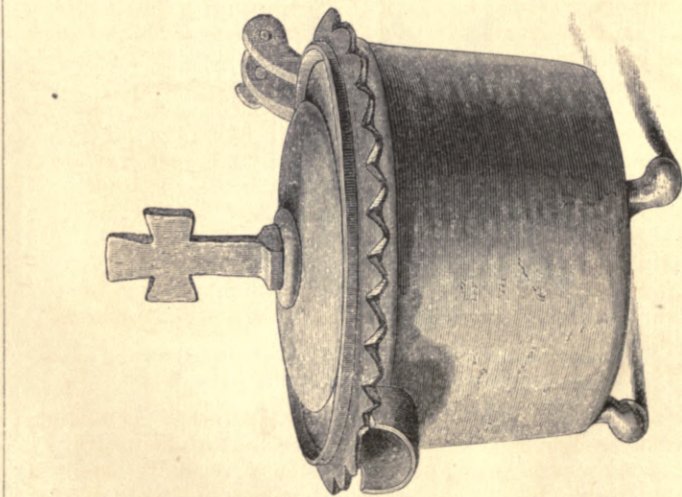


Fig. 2. Bronze pyx. Diam. 4 inches.



Fig. 5. Bronze censer. Length, 6 inches.

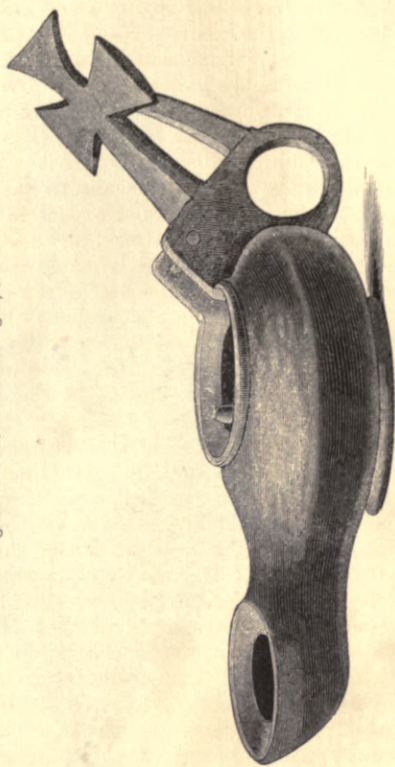


Fig. 7. Bronze lamp. Length, 7 inches.

Objects of sacred use found in Upper Egypt.

"The woodcut, fig. 3, presents to us the Coptic corban, for by this name those who follow the Coptic rite in the patriarchate of Alexandria—the Abyssinians among the others—call the breads made to be consecrated at the Eucharist. The original, which was shown at the meeting of the Institute, measured $3\frac{1}{2}$ inches in diameter; it was one of those unconsecrated breads that, by the Coptic ritual are, like the 'holy loaf' of the Salisbury use, given after mass to the people who have not communicated, as explained in the Church of Our Fathers, t. i. p. 137. By the Copts, the twelve small crosses on it are meant to signify the Apostles, while the square space in the middle marked with crosses represents our Lord; the inscription running round is Greek, and although the letters are somewhat imperfectly formed, it may be thus read:—*ἅγιος θεός, ἅγιος ἰσχυρὸς, ἅγιος ἀθάνατος*. According to the rite of the Copts, this eucharistic bread must be made and baked on the same day it is used; and for the purpose a small oven is to be found in the vestry of every church.

"The object next to be noticed (fig. 4) is a cruet for holding the wine to be consecrated at the celebration of the Eucharist: from its size it shows that a small measure of the liquid was needed in their liturgy. What must strike every student of classical antiquities is that from its inability to stand upright and by itself (thus requiring, as is shown in the woodcut, a stand, in the hollow of which it was placed to make it keep its contents from spilling), it retains the shape as well as usage of the ancient *amphora*—the wine-jar of the Romans, but without the two handles of that vessel. A great curiosity among liturgical appliances is the small vessel (fig. 5) for burning incense at the altar at the time of the liturgy; its cover has unfortunately been lost. The Hebrews, and after them the heathens, at their sacrifices, offered up incense, and the vessel for the purpose was among the Romans called *thuribulum*. On the ancient use of incense I have spoken in a work on the liturgy entitled '*Hierurgia*,' p. 517, 2nd ed. In the first ages the *thymiaterium*, *thuricremium*, or, as it is now more commonly termed, the thurible, was not formed so as to be swung, hanging by somewhat long chains, but it was carried in the hand by means of a short handle, and it was fashioned like the one before us. In fact at some churches where the Greek rite is followed, the *thymiaterium* is still made with a handle, as was exemplified by two very large silver thuribles among the liturgical articles lent by the Servian government to the South Kensington Museum, and that had been exhibited at Paris, A.D. 1867, in the history of art-labour. Only about the end of the eleventh century did the use of thuribles swung by chains become adopted either in the east or west of Christendom.

"Fig. 6. In all probability these small round vessels may have been used for carrying to the dying sick the holy oil for extreme unction. Two were obtained by Mr. Fortnum. In addition to the above he brought from Egypt one of the Christian lamps (fig. 7), which are by no means rare; the sign of the cross at its handle is unmistakeably plain; though the whole be devoid of much of that

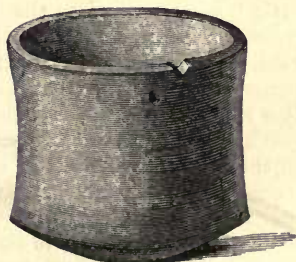


Fig. 6.—Small bronze vessel, probably for holy oil. Two thirds orig.

symbolic ornamentation which graces several others, this example is valuable, not merely as being so ancient, but as an Egyptian or rather Coptic specimen."

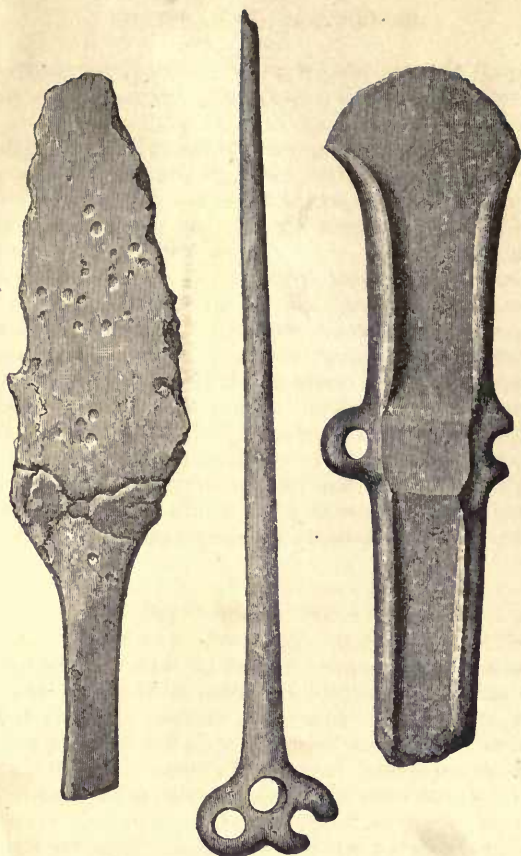
Mr. J. MACLEAN, F.S.A., showed a rubbing from an inscription on a slab in a church at Bodmin, to which the date of the eleventh century had been assigned, and of which he invited examination. Various readings were given, and the general opinion expressed was against the early date given to it.

The Chairman drew attention to two small silver boxes in the shape of a heart, exactly similar to that recently figured in the *Journal of the British Archaeological Association*, as a "Douglas" heart, and brought before that Society by Lord Boston. These heart-shaped boxes, Mr. Morgan observed, were of ordinary Dutch manufacture and objects of common use for toilet service. A ring, with a heart-shaped carbuncle surmounted by a crown, and called a "Douglas" ring, was also shown by the Chairman, who considered the title a misnomer.

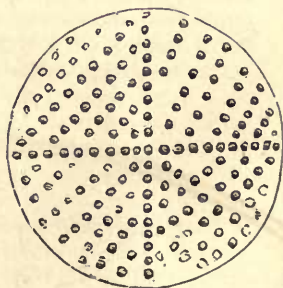
Dr. ROCK thought that the heart shape of the box and the heart on the ring were a simple matter of ornament with a devotional or symbolical bearing; the heart being probably that of the Virgin Mary or of our Lord.

Antiquities and Works of Art Exhibited.

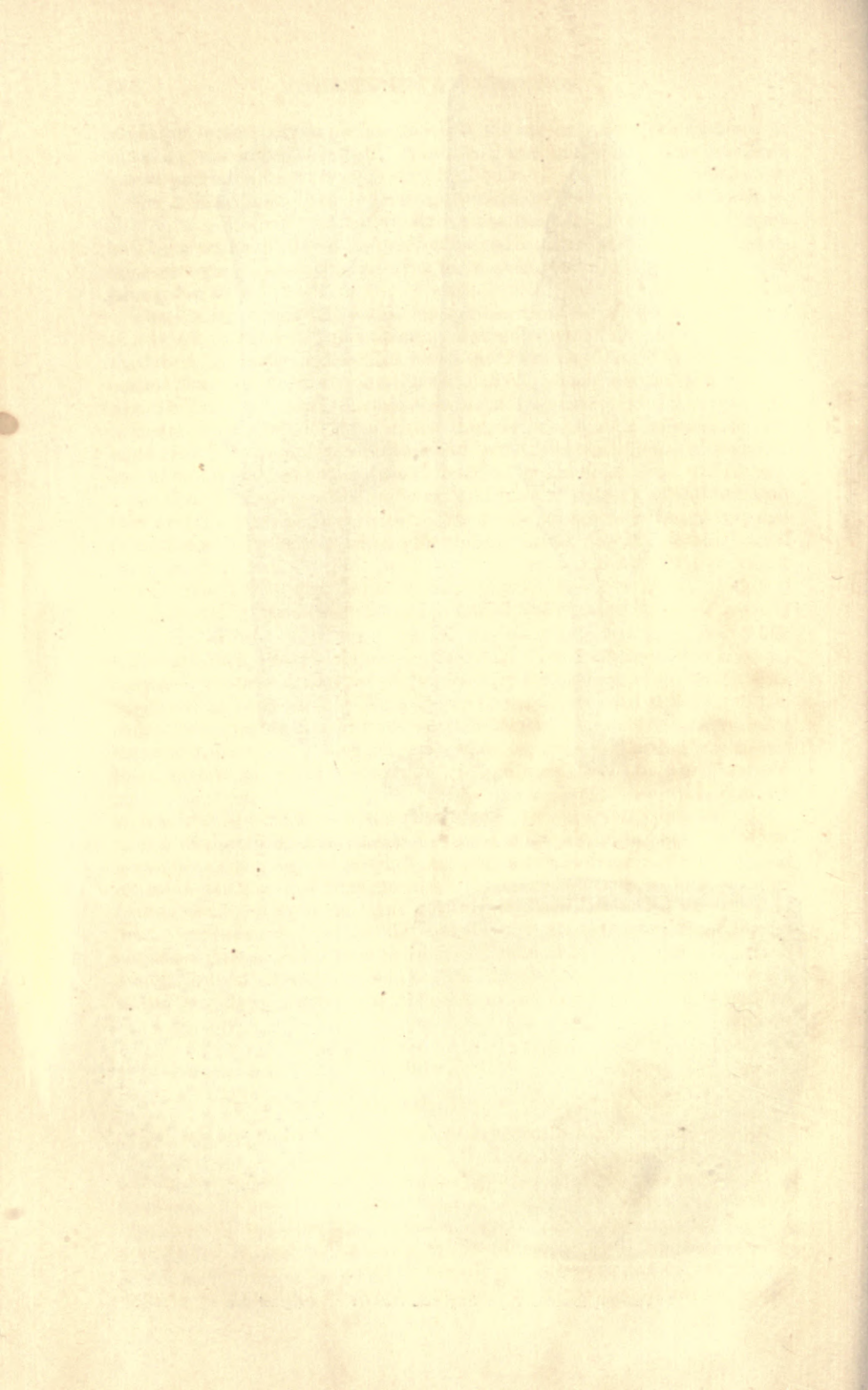
By Mr. WYNNE FFOULKES.—Three objects of bronze found about 1855 with an interment and cinerary urns at Bryn Crûg, about two miles from Carnarvon, and about half a mile east of the road towards Bangor. These relics, of somewhat uncommon fashion, are here figured. They consist of a small blade or dagger, with a flat tang for insertion into a haft; a pin or implement having a flat head pierced with three holes; the length of this object when perfect may have been about 6 in.; and a little celt of peculiar type, length $3\frac{1}{2}$ in., with a small pierced loop or ear on each of its sides, at about mid-length. This relic approaches most nearly to the class of palstaves, but there is no stop-ridge, only a slightly raised space between the side-loops; bronze palstaves or other implements of this description with two side-loops are very rare. An interment had been previously found at Crûg, accompanied by urns and a curious little "incense cup," on the bottom of which an impressed ornament in cruciform arrangement is to be seen. This remarkable vase was likewise exhibited by Mr. Ffoulkes, and it is here figured. It lay amongst burnt bones in a large urn that was covered by a second urn inverted over it, the space between the two vessels having apparently been filled with earth and charcoal. A bronze pin about $1\frac{1}{2}$ in. in length was also found in this deposit. The little cup, ornamented roughly by vertical rows of irregular round punctures, five rows of similar dots around the lower part and two rows around the lip, is of light reddish brown ware, with a few little pebbles imbedded in the paste. On the under side, which is slightly convex, is the cruciform ornament, a peculiarity of which other examples have been noticed in this *Journal*, vol. xxiv. p. 22. The cup measures in height, $2\frac{1}{4}$ in.; diameter, at the mouth, $2\frac{1}{4}$ in.; at the base, $1\frac{1}{2}$ in. There are no perforations on the sides, as frequently found in cups of this class. A more full account of the discovery and of other interments found at Crûg may be seen in the *Archæologia Cambrensis*, third series, vol. xiv. p. 259.



Bronze relics found at Bryn Crûg, near Carnarvon. Original size.



Incense cup found at Bryn Crûg, near Carnarvon. Original size.



By the CHAIRMAN.—A small glass box, set in a gilt frame, probably German work of the sixteenth century. It had been described as a monstrance, but was simply a box that may have been used for counters or other small objects.—Two small heart-shaped boxes of silver.—A lady's ring, with a heart-shaped carbuncle surmounted by a crown.

By Sir GEORGE BOWYER, Bart.—Photograph of the picture of "Our Blessed Lady of Philermos," at St. Petersburg, accompanied by a printed account of the original. The picture is one of those attributed to St. Luke; it is richly adorned with jewels, and the frame is beautifully chased. It is said to have been brought during the reign of the Grand Master de Villaret from the Holy Land to Rhodes, where it had been greatly venerated; thence it had been removed to Malta, and subsequently to St. Petersburg. Dr. Rock observed that the picture "was one of the Black Madonnas which it was the fashion for a certain period to paint." There were many well-known "Black Madonnas;" Our Lady was said to be so painted out of charity to us. The present example was probably of the twelfth or thirteenth century. Some discussion arose on this point, in the course of which Mr. Waller read an extract from Molanus, to show that St. Luke was not considered a painter by that learned writer on Christian art.

By Mr. A. MYERS.—A piece of sculpture in ivory of the seventeenth century;—two Persian tiles;—and a chalice and paten of late German work.

By Messrs. LAMBERT and RAWLINGS.—An elaborately wrought lady's girdle, considered to be Italian work of the sixteenth century;—a pair of salts of the time of Charles II.;—a small "grace-cup" of the year 1684-5;—a German gilt casket of early seventeenth century work, with a remarkable lock;—other pieces of old plate, and a specimen of "verniss Martin," or lacquered painting, by Martin of Paris, in the time of Louis XIV.

MEDIEVAL SEALS.—By Mr. EDWARD TYRRELL.—Matrix of the seal of William Picard, probably the rector of the church of St. Magnus "ad pedem pontis," London, presented, as appears by Newcourt's Repertorium, by the abbot and convent of Westminster, 2 kal. Aug. 16 Edw. II. (A. D. 1322). The seal was found within a hundred yards of the church in making a coffer-dam in the Thames at the end of Fish Street Hill, during the rebuilding of London Bridge. It is of brass, of circular form; diameter, nearly three-quarters of an inch; the device is the Holy Lamb holding a cross, to which a bannerol is appended; legend—s' WILL' PICARD.

June 3, 1868.

The Very Rev. CANON ROCK, D.D., in the Chair.

An account of recent discoveries at Guisborough Priory, in the North Riding of Yorkshire, by Mr. J. E. B. BRUCE, was read.

In September, 1867, Captain Chaloner, R.N., the proprietor of the Guisborough estate, gave orders to clear away the accumulations which covered the remains of the Priory. Guisborough, with the greater part of Cleveland and the surrounding district, was, at the time of the Domesday Survey, in the possession of Robert de Brus. It had been granted to him by the Conqueror, with other possessions in Yorkshire, on account

of the part that he took at the Battle of Hastings, and in the reduction of the insurgents of the Northern counties. The son of this Norman baron, the second Robert de Brus, "by the counsel and admonition of Pope Calixtus II. and Thurstan, Archbishop of York," founded the Priory of Guisborough, "to the honor of God and of the Holy Virgin, and for the salvation of the souls of the king, of himself, his wife and children." In this charter of foundation (printed in Dugdale's *Mon. Angl.*, edit. Caley, vol. vi. p. 267), Agnes his wife, and Adam his son and heir joined. In 1289, as we are informed by Walter de Hemingford, a canon of Guisborough, the Priory was consumed by fire, together with many theological books and nine costly chalices, as well as vestments and sumptuous images. Shortly afterwards a new church was erected on a larger scale than that of any other monastic institution in Yorkshire.¹

After the Dissolution the work of destruction speedily began at Guisborough. On the 21st of November, 1541, a lease was granted to John Leigh, Esq., "of the buildings with the site and preeinets of the Priory to be then demolished and carried away." The "demolition" appears to have been effectually carried out, and it would seem that the tower and other lofty portions of the structure had been wantonly thrown down into the body of the church, crushing and burying the monuments and ornamental work. Sir Thomas Chaloner, ambassador to Charles V., obtained a grant of the site of Guisborough on the expiration of Leigh's lease, and for many years the ruins were used as a stone quarry for the neighbourhood. It has remained for his descendant to do something towards reviving the interest in the great monastery established by the knightly Norman, by directing the excavations to be made, which have been the means of displaying the grand features of the structure now laid open, and the noble and interesting monuments which its ruins have so long hidden. The excavations were commenced by cutting a trench across the church at about 200 ft. from the East window. The remains of a doorway of the Early English period were first discovered. This was probably the entrance from the cloisters.

The chief features of interest found in the course of the excavations are the coffins and monumental tombs of those connected with the Priory and the neighbourhood. Among them are those of Robert de Brus, lord of Skelton, the founder of the house, his wife, and his descendants and family connections. The monument of Robert de Brus, competitor for the crown of Scotland in 1290, appears to have been removed from the Priory to the parish church shortly after the Dissolution, and is engraved in Dugdale's *Monasticon* (vol. vi. p. 265). Before the high altar, in the centre of the choir, a quantity of decorative tiles was found, on which were the arms of Bruce. The patterns were, however, much varied. A few inches beneath the pavement, at the foot of the steps before the altar, lay a stone coffin. It measured 6 ft. 8 in. by 2 ft. 3 in., and contained the remains of a tall and aged man. From a consideration of various circumstances, these were considered to be the remains of the competitor for the Scottish crown, the grandfather of "Robert the Bruce," the champion of Scottish story.

The central tower would appear to have fallen wholly into the church. On removing the mass of masonry formed by its ruins three monumental

¹ See Sharpe and Paley's "Parallels of Gothic Architecture."

slabs were found. They were 9 ft. 6 in. in length, and 4 ft. 5 in. broad. On the centre slab was the inscription, in characters of the fifteenth century—*SIT PAX ETERNA TECUM VICTORE SUPERNA*. Five feet below the surface of one of these slabs the skeleton of a man was discovered in the remains of an oak coffin. The bones were pronounced to be those of a person 6 ft. 8 in. in height. In the coffin two circular bronze buckles were found. The third slab had had cross-plates, the studs or rivets of which alone remained. In the *débris* above were found considerable portions of a monumental shrine, the details of which were of fine workmanship, painted in bright colours and gilt. Other remains of interest were found, consisting (it was presumed) of portions of the lead, silver, and iron, fused together in the great fire of 1289. In this fire, Hemingford states that all the chalices, images, and plate were destroyed, and the heat reduced them to such a liquid state that the molten metal penetrated through the ancient floor of the first monastery. Among the ruins were found remains of an effigy in chain mail; part of a figure in plate armour of the early part of the fifteenth century, probably representing one of the Latimer family; bosses from the roof, rich in gold and colours; fragments of coloured glass, pottery, and alabaster shrine work.

Mr. JAMES YATES referred to a cartulary of Guisborough Priory, formerly in the possession of Mr. William Hamper, at Birmingham, which does not appear to have been known to the editors of the last edition of Dugdale's *Monasticon*; the only cartulary there cited being that preserved amongst the Cottonian MSS., Cleop. D. II., which is also the only one noticed in the valuable Index of Cartularies by Sir Thomas Phillipps. Mr. Yates likewise mentioned the wooden crucifix, supposed to have belonged to Guisborough Priory, and of which he had given a description at a previous meeting. (*Arch. Journ.*, vol. xxiv. p. 68.) It belonged to a Mr. Ripley at Whitby, and had been regarded with interest on account of an inscribed parchment found concealed within it, bearing the talismanic word *AGLA*.

Brigadier-General LEFROY gave an account of the great cannon of Mahommed II., lately presented to her Majesty by the Sultan. This interesting memoir is reserved for future publication.

Mr. HEWITT thought the date ascribed to the great gun at Ghent (1382) to be doubtful.

The Chairman made some remarks upon the attribution to St. Luke of portraits representing the Blessed Virgin, to which attention had been invited at a previous meeting. The conclusions at which he had arrived were that there was no approach to contemporaneous evidence in such attribution, and that none of the portraits so assigned to St. Luke were earlier than the eleventh century, if so early.

Mr. J. G. WALLER exhibited, and read some notes upon a portion of a palimpsest brass from Cobham, Kent.

"The fragment is part of an inscription to William Hobson, formerly master of Cobham College, who died in 1473. The text of the inscription is preserved in the account of the Cobham family prefixed to Holinshed's *Chronicles*, as follows:—'*Hic jacet dñs Willm̃us Hobson quondam Mag̃ri istius Collegii, qui obiit xxj. die Augusti Aº dñi MCCCCLXXIII. cuius aiē ꝑꝑicietur deus.*' On the reverse is part of an inscription beginning thus—'*Hic jacent Magister L.*' etc.; in the last line

are found the names "Isabella et Agnes." The term *Magister* seems to imply a priest; if so, two sisters must be meant as included in the memorial. But it is extremely unusual to find a memorial to a priest including any female members of his family. There is an instance at Over Winchendon, Bucks, in which the mother of the deceased is mentioned, but it is almost the only example that I can call to mind. The designation *Magister* is found given to those who have taken a degree at the Universities, and also to Bachelors of Laws and others. If therefore the inscription was intended for a man of law, the female names might be those of wives. The character of the engraving proves it to be at least twenty years earlier in execution than the other, but the surface of the metal shows the file-marks quite sharp, as well as the cutting, proving that the plate could never have been used.

"The date is early, for the palimpsest brasses are mostly found in the sixteenth century, and are accounted for by the destruction of churches that ensued after the dissolution of monasteries in 1542. When we find a reverse of Flemish manufacture it is usually after 1566, when so many churches in the provinces of Brabant and Hainault were pillaged by the insurgents. The date of the example at Cobham and its condition show that it belongs to another category, and the occurrence of such a plate must be explained as being the result of waste in the workshop. This is constantly going on now in modern practice. A workman makes a mistake, either in dimensions or otherwise, and he finds it easier to throw the metal aside and begin afresh, leaving the waste to be used on a subsequent occasion."

Antiquities and Works of Art Exhibited.

By the Rev. J. STACYE, of Sheffield.—A small collection of relics found in Ireland, chiefly in the neighbourhood of Gilford, county Down, at different times and places. They consisted of a bronze leaf-shaped sword, quite perfect; length, 25 inches.—A bronze taper blade, of the type described by Mr. C. Tucker in this Journal, vol. xxiv., p. 110. It is in excellent preservation and of elegant form; one rivet remains in its place; the edges and point of this weapon are as sharp as when first made; length, 17½ in.—A small bronze socketed javelin-head with two side-loops.—A bronze socketed spear-head, the edges and point very sharp.—A very fine bronze celt, much ornamented, of the second type described by Mr. V. Du Noyer, in his classification of bronze celts, in this Journal, vol. iv. p. 2.—Two stone celts, and a rude implement of flint, from the North of Ireland; also a plain wedge-shaped bronze celt, of Mr. Du Noyer's first type, found in co. Limerick, and a flint arrow-head.

By the Rev. J. BECK, F.S.A.—A collection of flint weapons obtained in Denmark, some of them of peculiar forms.

By Mr. W. J. BERNHARD SMITH.—A perforated oval boulder of chert—probably a maul-head—found near Marlborough, Wilts.—Also an African iron sword, of the classical leaf-shaped type; the handle, of wood, with a pommel of iron wrought in an open pattern, with this peculiarity—that it is merely cemented into the wood, and the tang of the blade does not pass through it.

By Sir THOMAS E. WINNINGTON, Bart.—Photograph representing three

sepulchral slabs recently discovered in the old churchyard of St. Mary Witton, Droitwich. The central slab is 5 ft. long and 2 ft. 2½ in. broad. The arms of the cross terminate in vine leaves, which also branch out from each side of the stem. An elegant circular ornament occupies the centre; on the dexter side is placed a plain annulet or ring with a bar across the middle. Another of the slabs measures 3 ft. in length, and the smallest barely 22 in. The stones are in good preservation, and they will probably be removed to St. Andrew's church, as that of St. Mary Witton has long since been destroyed.

By Mr. H. F. HOLT.—A triptych, in oak; French work, of the second half of the 15th century. The central panel represents a Gothic arch springing from two columns, the whole being profusely gilded and decorated. The recess is paved with black and white marble in chequered squares, and the wall is hung with green tapestry *semée* with golden fleurs-de-lys. In the foreground is the figure in profile of Louis XI., kneeling on a cushion of cloth of gold with bullion tassels, his hands being upraised and joined in prayer. Before him is a table covered with a green cloth, upon which is lying an open illuminated missal. The king wears a short red cloak trimmed with fur, white breeches, and leathern boots with tops reaching to his knees, a collar of knighthood is about his neck, and a sword hangs by his side. On the riser of the step is the inscription in gold letters—"LUDOVICUS REX." The wings on either side are gilded, and divided into lozenge-shaped compartments, each of which contains four impressed fleurs-de-lys.

The diptych has been formed by first sawing off a piece of the wood (which was afterwards converted into shutters), and then by carving the centre panel in relief. The hinges are elegant, and formed as fleurs-de-lys. Unfortunately the fastening has become detached, and is lost.

It was obtained in 1773 from an ancient house, between Plessis les Tours and the hospital, called "La Rabaterie," which still exists, and has always been commonly described and recognised as the residence of Olivier le Daine—the barber, confidant, and minister of Louis XI.

Two portrait medallions in wax by the celebrated artist of the 16th century, Alphonzo Lombardi of Florence.

1. Alphonse d'Avalos, Marquis du Guasto, lieutenant-general of the armies of the Emperor Charles V. Born 1502, died 1546. Bust in profile turning towards the right. The marquis is the bridegroom in the well-known picture of Paul Veronese at the Louvre, representing "Les Noces de Cana."

2. Mary of Aragon, wife of Alphonse d'Avalos, Marquis du Guasto. Bust in profile, turning towards the left.

By Mr. C. BOWYER.—Small Greek, Roman, and Egyptian bronzes and sculptures.

By the Rev. J. FULLER RUSSELL, F.S.A.—The decease and glorification of the Blessed Virgin, a miniature drawing by Don Silvestro Camaldolese, on vellum, illuminated with gold. This miniature, when in the possession of the late W. Y. Ottley, was described by Dr. Dibdin as follows:—"One 'great and glorious' sample of ancient art, exhibited in choral books, Mr. Ottley, however, still possesses, which must unquestionably be considered as the Jupiter planet of the system; in other words, it was executed by the famous Don Silvestro degli Angeli, and is described

by Vasari as the *chef-d'œuvre* both of the artist and of the age. First, for the dimensions.—From the bottom of the picture to the central top, which is pointed, for the reception of the other part of the Virgin and her attendant angels, there are 14 in.; the width of the illumination measures 10 in.; the surrounding border, in a sort of tessellated or mosaic squares of black, yellow, red, and blue, is an inch in width. Secondly, for the subject, which represents the Death of the Virgin. The corpse is surrounded by all the female relations of the deceased, with the twelve Apostles, and our Saviour in the centre; the latter of whom receives in His arms the departed spirit (in the form of an infant) of His mother. The countenances of this solemn yet splendid group are full of sorrowful expression; but in the midst of such a general and almost insupportable exhibition of grief, the countenance of our Saviour is marked with a mildness, a dignity, and composure which are perfectly heavenly. Among the rest, the figure of St. John is eminently graceful and expressive; and the female at the foot of the Virgin has a quiet composed character not unworthy of the pencil of Raffaele. There are some lovely countenances among the females, but to particularise would be endless. Every head is surrounded by a thick and shining *nimbus* of gold, and above, the Virgin, 'in glorious majesty,' sits enthroned with eight attendant angels—in attitudes which equally express their piety and rapture. The whole of the space which is between the assumption of the Virgin and the group below consists of one broad, highly-raised, and indurated mass of resplendent gold. The entire composition, executed in body colours, much glazed, absolutely partakes of its original freshness and radiance. This magnificent and unique specimen of ancient art is justly and highly valued by its owner. Indeed it is beyond all price. I had almost forgotten to notice its age, which is the middle of the 14th century."—Bibliographical Decameron, vol. i. pp. cxi. cxii., note. 4to. 1817. The late Professor Waagen, in allusion to this drawing, says:—"Though the faces still have the type of Giotto, there is in Christ a dignity, in the Apostles a depth of expression of grief, in every part such refined taste, such a delicate execution, that it far surpasses all the miniatures of that age that I have ever seen." Works of Art and Artists in England, vol. ii. p. 129. 8vo. 1838. See also Vasari, ed. Flor. 1832, p. 202; Bohn's translation, vol. i. p. 283.

By the Hon. WILBRAHAM EGERTON, M.P.—A painting in fresco, on plaster transferred to panel, representing two half-draped female figures, on a black ground. One of the figures may have been intended to portray Flora, soaring upwards on clouds: she has a wreath of flowers, and holds a basket of flowers in her right hand, another wreath in her left. The other figure appears in the act of taking flowers from the basket and placing a wreath on her head. This subject is engraved in a work entitled *Picturæ Antiquæ Cryptarum Romæ*, and described as "*Peinture antique des Thermes de l'Empereur Adrien*." Mr. Egerton observed that the authenticity of the painting, as a relic of the classical period, had been called in question. It was purchased by him about twelve years ago in London, on the dispersion of a foreign collection.

By Messrs. LAMBERT and RAWLINGS.—Various objects of plate, including an ancient chalice formerly belonging to the parish of Kinnoul; a grace-cup of the time of Charles II.; a caster of the year 1701; a cocoa-nut lamp of German 17th century work; and a

jewel with St. John Nepomuk on the obverse, and St. Augustine on the reverse.

By Mr. J. E. B. BRUCE.—Casts of seals of the Bruce family; the “Terriar” of the Priory of Guisborough, Yorkshire, *circ.* A.D. 1220; photographs of charters to the Priory; objects found in the recent excavations there, namely, fragments of leather, two buckles, and a fused lump of mixed metals, &c., supposed to be a relic of the fire in 1289, by which the Priory was consumed.

July 3, 1868.

Mr. OCTAVIUS MORGAN, M.P. and V.P., in the Chair.

Mr. G. SCHARE, F.S.A., gave the following account of a portrait of Alice, the wife of the celebrated painter, Nicholas Hillyard, or Hilliard, which he exhibited:—

“The miniature which I now have the pleasure of submitting to the Institute, affords an important addition to our knowledge of the personal history of our first English-born painter, Nicholas Hillyard. He was the son of Richard Hillyard, of Cornish extraction, and of Laurence, daughter of John Wall, a London goldsmith. Born in 1537, his grandfather, on the mother’s side, probably determined the profession he was to follow. Like the great Italian artists of old, he was goldsmith, designer, and painter. He married Alice, daughter of John Brandon, chamberlain of the city of London; and it is her portrait, painted by Hillyard in 1578 when she was 22 years of age, that I now lay before you. The miniature is circular, in its original rose-turned case of logwood, with an ivory circular rim inside bordering the glass. An inner border, of oval form, contains, in gold caps on a deep blue ground,—ALICIA BRANDON NICOLAI HILLYARDI, QUI PROPRIA MANU DEPINXIT, UXOR PRIMA. The spandril or spaces on each side between the oval border and outer circular frame are occupied by golden scroll work and two shields, the one on the dexter side bearing the arms of Hillyard or Hildyard, as given in Burke’s Armory, *azure* a chevron between three mullets *or*, and that on the sinister side the arms of Brandon, Barry of six *argent* and *gules* a leopard spotted, queued, with 2 tails *or*. Upon the rich blue ground within the oval is inscribed in brilliant, small gold letters,—Ano Dni 1578. *Æts.* S. 22. The monogram, N·A·H· in gold, is repeated under a star of five points on each side of her head. She wears a gold chain round her neck; a picture-box, or small oval gilt frame, is partly hidden inside the front of her white dress; a black ribbon tied to it passes round her neck; an ear of green corn is likewise fastened to it. A black veil covers the top of her head, and falls down behind a wide-spread round ruff of rich, white lace, the colour of remarkable purity. A black overdress covers her shoulders, and leaves open the full white sleeves patterned with fine grey scroll-work. The diameter of the miniature is $2\frac{3}{8}$ in. The extreme diameter of the outer case, measured at the back, is $3\frac{3}{8}$ in.

“This is one of the most perfect miniatures by Hillyard that I have ever seen. The spelling of the name is remarkable, but it is confirmed by the famous picture of the same size representing the artist himself, belonging to Lord de Lisle at Penshurst. Walpole mentions a portrait of him as a boy aged 13, belonging to the Earl of Oxford. This passed to the Duke of Portland, who still owns it, and it was lent by him to the

Manchester Exhibition in 1857. It is very small, with a red background having the letters NH. 1550, upon it, and the name and age 13 in gold on blue round it. The dates, however, do not afford the same birth-date as the Penshurst miniature, and one also of the painter at the age of 37, belonging to the Duke of Buccleuch, which is thus inscribed,—Ano Dni 1574. Aetatis suæ 37. The Duke has also a miniature of Hillyard's father, dated 1577, Aetatis 58, formerly in the Strawberry Hill collection. Lord de Lisle also exhibited a miniature of the elder Hillyard at Manchester. The Penshurst miniatures formerly belonged to Sir Simon Fanshaw.

"Hillyard was a man of good position. He is styled "Gentleman" in the patent granted to him by King James. He died 1619. The poet's encomium on this talented painter has often been cited :—

. a hand or eye
By Hilliard drawn, is worth a history
By a worse painter made.

As an example of a hand may be cited the miniature of Lucy Harrington, Countess of Bedford, from Stowe; also that of the Countess of Essex, from Strawberry Hill, in the possession of the Earl of Derby."

The Chairman made some remarks upon the large and remarkable collection of ancient spoons which had been brought together chiefly by the Rev. J. Beck. The earliest spoon that had been described as existing in this country, except that found in a Saxon barrow at Stodmarsh, Kent, figured *Archæologia*, vol. xxxvi. p. 179,² and the gold coronation spoon preserved at the Tower with the Regalia, and figured by Mr. Shaw in his *Dresses and Decorations*, is the spoon of Henry VI., left by him at Bolton Hall, Yorkshire, after the battle of Hexham in 1463, and figured in the *Antiquarian Repertory*, vol. iii. p. 297. Mr. Morgan had assigned this royal relic, on the authority of the annual letter stamped upon it, to the year 1445.³ The second known dated example was exhibited on the present occasion. It had lately been acquired by Mr. Dunn Gardner, and was probably of the reign of Henry VII. It was a valuable example, and was perhaps made for the baptismal service of a child called Nicholas, in honour of the saint, to whom great affection for children was ascribed. An example of an early leaden spoon, found in Ireland, was also upon the table. It was considered to have been used for putting incense into the thurible, and may be of the sixth or seventh century. Coming to more modern times, he might mention that "Apostle spoons" were not usually earlier than the reign of Elizabeth; and they continued to the time of the Restoration. At that period a new form of bowl came into use. It was oval, with a tongue at the back to strengthen it. Of this period, and of the next, when the handle was turned down, there were many "fancy" shapes, arrangements, or combinations of spoons with forks and other articles for the table. Some of these were special fashions, which con-

¹ The Storm, by Donne, vol. 2, p. 117.

² A second Anglo-Saxon spoon may be cited, found in Kent, and published by Douglas, *Nenia Brit.* p. 6; Akerman's *Pagan Saxondom*, pl. 33. The bowl in that example is perforated throughout, like a strainer; the Stodmarsh specimen has only five small holes.

³ See Mr. Morgan's Chronological List of Ancient Plate, appended to his *Tables of the Annual Assay Office Letters*, given in this Journal, vol. x., pp. 34, 39. A spoon, the second there cited, now at Alnwick Castle, is ascribed to the year 1499, and Bishop Fox's spoons, at Corpus Christi College, Oxford, to 1506.

tinued in favour for a time. The foreign spoons, of which the examples before him were numerous, were chiefly Dutch, and not very early. The twisted pattern was an Oriental idea. Some of the shapes of the Norwegian spoons and others from the North of Europe were of special and remarkable form. The collection deserved high commendation; it was one of the best he had seen, and he regretted that the short time at his disposal prevented his doing justice to it. Special exhibitions of this nature illustrative of arts or manners were always of much interest. Mr. Morgan recalled, with satisfaction, the valuable collection of mediæval plate that had been brought together by the Institute in 1860, when an extensive series of spoons had been displayed, as also on a previous occasion, at one of their meetings in 1852. The numerous valuable specimens, however, now combined for the gratification of the members, appeared to present a wholly distinct and fresh exemplification of the varied fashions of spoons from a very early period.⁴

The Rev. J. BECK, on being called upon, spoke of the St. Nicholas spoon belonging to Mr. Gardner. The exact year of its production was not quite ascertained; but it was certainly the second earliest example known. He especially commended Mr. Temple Frere's collection of sixty-four early English spoons. The collection now brought together was very rich in English spoons.

Mr. J. H. PARKER gave an account of recent archæological discoveries in Rome. This discourse was illustrated by maps and drawings, and a large number of photographs.

Mr. Parker commenced by speaking of the results of the explorations conducted by various parties of excavators, one of which was the recovery of fragments of the plan of Rome in the third century, which was executed on slabs of marble; and the settlement of the site of the Porticus Liviae.

The Papal Government, under the direction of Visconti, had made an important excavation at the back of the Tiber, in the old harbour between the Emporium of Comnenus and the river. This had been proved to be the ancient *marmorata* or landing place for marble, which had been abandoned on account of the inundations it was subject to. Dr. Henzen, the President of the German Institute, had also made some valuable discoveries. Some other discoveries had been made by accident during the present season, which in Rome had passed almost without notice.

The excavations carried on under the direction of the British Archæological Society of Rome had been of considerable historical importance. They have shown in several places the line of the Wall of the Kings, where it was not generally known to exist; the wall of the City proper; and the existence of an outer line of defence in the shape of a great bank of earth or "agger." Several of the aqueducts and reservoirs had also been further elucidated by the researches of the Society, of which Mr. Parker spoke in detail. Some discussion followed Mr. Parker's lecture, in which Dr. Rock and others took part.

Antiquities and Works of Art Exhibited.

By the Rev. J. BECK, F.S.A.—A collection of spoons from Denmark,

⁴ See some more detailed observations by Mr. Morgan on this subject, Arch. Journ., vol. ix., p. 301; vol. xvii., p. 260.

Some curious remarks on ancient spoons are given by Dr. Hume, Ancient Meols, p. 268.

Norway, Sweden, and Lapland, of various dates and material, comprising many of special forms ; six silver spoons, Dutch, seventeenth century ; English spoons, seventeenth century ; also English spoons with perforated bowls, used as tea-strainers.—A head of a halberd found at Gottenburg in Sweden.

By Mr. J. DUNN GARDNER.—An English spoon with the effigy of St. Nicholas of Myra, bearing the inscription—SVNT. NICOLAS. PRAV. FOR. WS. The hall mark is the Lombardie *b* ; *temp.* Henry VII. or VIII.

By Mr. R. TEMPLE FRERE.—A collection of sixty-four old English spoons, of the sixteenth and seventeenth centuries.

By Mr. J. HENDERSON, F.S.A.—Two German spoons, one dated 1552, the other with a shield of arms of the seventeenth century ; also two Russian spoons.

By Mr. J. MORTIMER HUNT.—Leaden spoon found near Cork, supposed to have been used for incense, and ascribed to the sixth or seventh century ; English pewter spoons, of the seventeenth century, found at Bermondsey.

By Mr. C. W. REYNOLDS.—English spoons of the sixteenth and seventeenth centuries ; folding spoons, combining various table conveniences.

By Mr. T. G. SAMBROOKE.—Dutch silver-gilt spoons, of the seventeenth and eighteenth centuries, given as baptismal presents.

By Mr. W. MASKELL, F.S.A.—Six silver spoons found in Somersetshire.

By Mr. C. VILLIERS BAYLY.—Spoon of rock crystal, with enameled mounting, sixteenth century ; two silver ladles, of the time of Queen Anne, formerly the property of Admiral Anson ; five English spoons of the sixteenth and seventeenth centuries ; two spoons with silver handles and wooden bowls, German work.

By Mr. R. PHILLIPS.—Ivory spoon and fork combined, Italian work, sixteenth century ; two wooden spoons, Oriental work ; and a modern Russian silver-gilt spoon.

By Mr. T. VILLIERS LISTER.—Fourteen Norwegian and Danish spoons of the seventeenth century.

By Messrs. HUNT and ROSKELL.—Three Russian silver spoons ; Norwegian silver spoon, with hollow stem, seventeenth century ; German silver spoons, engraved with arms, seventeenth century.

By the Rev. F. SPURRELL.—A portrait of a lady, on panel, lately purchased at Chelmsford : it had been obtained from an old house in the neighbourhood. In one corner is the date—ANNO D'NI 1582,—and in the other—ÆTATIS SVE 25. The dress is of crimson color, with a ruff, gold chain and other usual features of costume at the period. Unfortunately, no clue has been traced towards identification of the portrait.

By Messrs. LAMBERT.—Three grace cups of the Guilds of the Clothworkers, the Hatmakers, and the Boot and Shoemakers of Luneburg, inscribed, and hung with pendant *plaques* of arms of the Masters of the Guilds ; date the seventeenth and eighteenth centuries ; a Greek or Russo-Greek shrine, ornamented with paintings of kings and saints ; a chalice, dated 1632 ; a grace cup and cover, A.D. 1693 ; another, chased, with a dish to match, standing on a foot, inscribed,—“Ex dono civitatis Glocestriæ.”

Royal Archaeological Institute of Great Britain and Ireland.

BALANCE SHEET FOR THE YEAR 1867.

RECEIPTS.

	£	s.	d.
Balance at the Bank, Dec. 31, 1866	144	15	3
" in the House	35	18	11
Annual Subscriptions, including Arrears and Payments in advance for 1868	572	4	0
Entrance Fees	22	1	0
Life Compositions	52	10	0
Sale of Publications, &c.	31	6	0
Donations to Removal Fund	20	10	0
Subscriptions to Notices of the Monthly Meetings	4	12	0
Debt recovered	2	10	0
Investment Account	100	0	0
Interest thereon	3	8	10
Balance of Receipts, on Hull Meeting Account	117	7	7

£1107 8 7

Examined and found correct, June 12, 1868.

Signed { JOHN STEPHENS, } Auditors.
{ WALTER H. TREGELLAS, }

EXPENDITURE.

	£	s.	d.	£	s.	d.
Publication Account:				200	0	0
Messrs. Bradbury & Evans	67	10	9			
Engraving and Printing				267	10	9
Library Account:						
Books purchased, &c.					5	8
Household Expenses:						
Hire of Rooms for the Monthly Meetings, Arundel Society				12	12	0
Secretary's Salary				102	18	4
Insurance and Sundries				19	14	5
Stationery, &c.				6	16	0
Rent				188	2	6
Charges incidental to Removal				231	17	6
				502	0	9
Petty Cash Disbursements:						
Attendance				60	2	6
Postages, and delivery of Journal				31	5	1
Coals and Gas				4	15	0
Repairs, Cleaning, and Sundries				8	12	4
Cab-hire				6	12	8
				111	7	7
Balance at the Bank, Dec. 31, 1867, including Exchequer Bill				145	9	10
Balance in House				13	6	2
				160	16	0
				£1107	3	7

Submitted to the General Meeting, in London, June 12, 1868, unanimously approved and passed.

(Signed) G. T. CLARK, Chairman.



Archaeological Intelligence.

A ROYAL Commission has been issued for ascertaining what Historical MSS. exist in private and other collections. Its objects will be best understood by the following extract :—"Whereas it has been represented to us that there are belonging to many Institutions and private families various collections of Manuscripts and Papers of general public interest, a knowledge of which would be of great utility in the illustrations of History, Constitutional Law, Science, and general literature, and that in some cases these Papers are liable to be lost or obliterated : and whereas we are informed that many of the possessors of such MSS. would be willing to give access to them, and permit their contents to be made public, provided that nothing of a private character or relating to the title of existing owners should be divulged : and whereas it appears to us that there would be considerable public advantage in its being generally known where such Papers and MSS. are deposited, and that the contents of those which tend to the elucidation of History, and the illustration of Constitutional Law, Science, and Literature, should be published."

Power is then given to call in the aid of possessors of such MSS. to further the objects of the Commission, and, with their consent, to make abstracts and catalogues of such documents. The Circular of the Secretary of the Commission is excellently expressed. The object of the Commissioners is solely the discovery of unknown Historical and Literary materials. They will cause Reports to be made on the MSS. indicated to them, and, if necessary, Lists or Calendars. These will not be made public without the consent of the owners.

It will be very gratifying to the members of the Institute to learn that the opportunity will be given, by the Architectural Exhibition Society, for inspection of a series of the admirable drawings by our lamented friend, the late Rev. J. L. Petit. Familiar as we have long been with no small number of the productions of his talented pencil, through the frequent reproductions for which we have been greatly indebted to his generosity in enriching the pages of our Journal, during twenty-four years, constantly cheered by his liberal encouragement, we must hail the privilege presented to us in such a collective display of his works. The exhibition, open till the close of July, at 9, Conduit Street, comprises architectural sketches (339 in number) in all parts of the British islands, in France also, in Switzerland, Germany, Italy, Spain, Palestine, and Egypt. The catalogue of this highly interesting exhibition is embellished by one of Mr. Petit's tasteful etchings, a view of New Abbey in North Britain. Scarcely any of the results of his genius, however, have surpassed the valuable series of views of Howden Church, Yorkshire, given in this volume of the Journal in accordance with the generous intentions of our friend, most kindly carried into effect by his sisters and executors.

The study of Prehistoric Archæology, to which a special Section was devoted, under the auspices of Sir John Lubbock, at our Annual Meeting in the Metropolis in 1866, has rapidly advanced. It received a fresh impulse in this country from the International assembly of antiquaries through the meeting of the British Association at Norwich during the last

summer. The International Congress of Prehistoric Archaeology will take place this year at Copenhagen, under the presidency of the eminent antiquary, Worsaae, and will commence on August 27. Such a gathering cannot fail to prove of high interest, and be attended with scientific results of great importance. The first Congress of this special nature was held at Spezzia, in 1865; to this succeeded Congresses, in successive years, at Neuchâtel, Paris, and Norwich. The transactions of last year's meeting will shortly be issued to the members who took part on that occasion. Persons desirous to obtain information, or who purpose to take part in the proceedings this year, are requested to address the Secretary of the Committee of organisation, M. Valdemar Schmidt, Palais du Prince, Copenhagen. The *cotisation* (10s.) may be remitted to Baron C. J. Hambro, 70, Old Broad Street, London.

On a former occasion we invited attention to the formation of an Archaeological Society at Rome, and to the advantageous results of their operations, in which our President, Lord Talbot de Malahide, at that time sojourning in the Eternal City, took warm interest. Several valuable publications have been issued under the auspices of the Society; amongst these the following may be mentioned:—Lecture on the different modes of Construction employed in ancient Buildings, and the Period when each was introduced; by C. L. Visconti and Mr. J. H. Parker.—Recent Excavations in Rome, in 1868, by the British Archaeological Society, assisted by the Roman Exploration Fund; by Mr. J. H. Parker.—Proceedings of the Society for 1868-69.—The Ancient Streets of Rome and Roads in the Suburbs; a lecture by Dr. Fabio Gori and Mr. J. H. Parker.

The Council of the Huddersfield Archaeological and Topographical Association has determined to commence the issue of their Transactions, under the title of *The Yorkshire Journal of Archaeology*. The first part is announced for immediate publication, and will comprise memoirs on the Topography and Antiquities of Yorkshire, by the Rev. Canon Raine, Dr. Walker, Mr. Monkman, Mr. Fairless Barber, and other local archaeologists. To the friendly assistance of the gentleman last named the Institute has been indebted for the results of his researches into the Roman vestiges at Slack, a subject of much interest, to which further notice will be invited in the proposed Journal. Persons who desire to join the Association are requested to communicate with Mr. F. Barber, Castle Hill, Rastrick.

The increasing appreciation of documentary evidences, public and private, is satisfactory. We have not forgotten the dispersion of a mass of Exchequer Records; we might advert also to the destruction of municipal records and family memorials, condemned as "rubbish;" the day has, we trust, passed for such malpractices. The Commission, announced on the previous page, will exert an important conservative influence. As a practical effort of essential value, we may mention the institution of the HARLEIAN SOCIETY, for publication of evidences relating to Genealogy, Family History, and Heraldry. The Hon. Sec. is G. J. Armytage, Esq., F.S.A., Brighouse, Yorkshire.

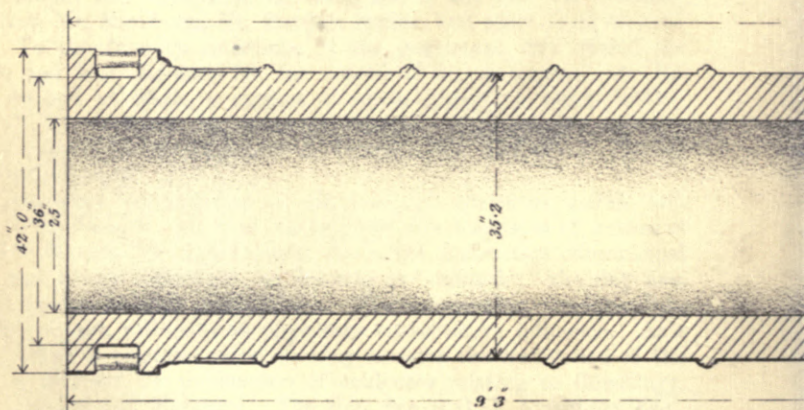
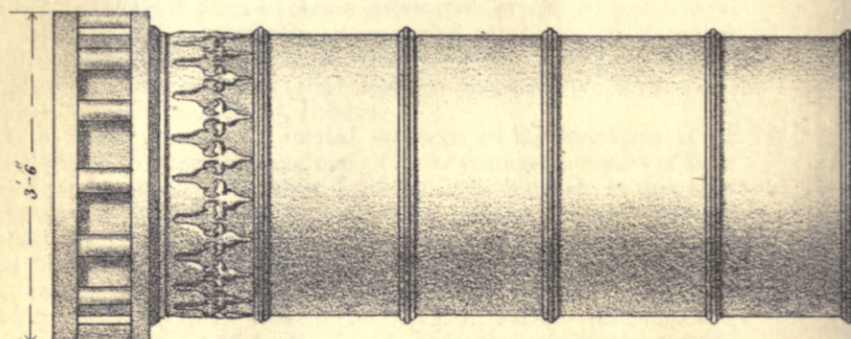
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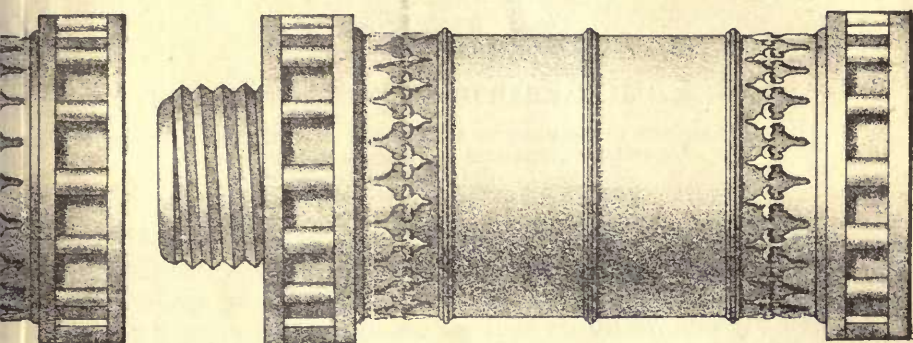


IMMAD II, cast AH 868 (A.D. 1464.)

PRESENTED TO

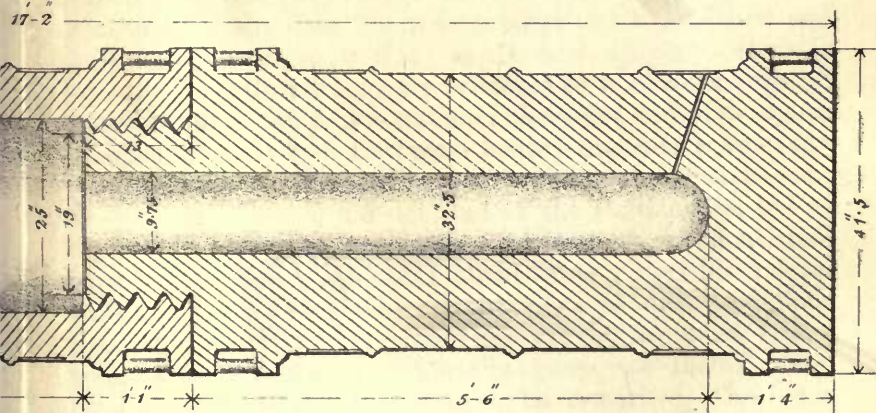
SULTAN ABDUL AZIZ KHAN, 1866.

OF ARTILLERY, WOOLWICH.



Scale $\frac{1}{24}$ "

LONGITUDINAL SECTION.



The Archaeological Journal.

DECEMBER, 1868.

THE GREAT CANNON OF MUHAMMAD II. (A.D. 1464.)

RECENTLY PRESENTED TO THE BRITISH GOVERNMENT BY THE SULTAN, AND
NOW IN THE MUSEUM OF ARTILLERY, WOOLWICH.¹

By Major-General J. H. LEFROY, R.A., F.R.S.

THE great cannon of the Dardanelles have been a subject of wonder to travellers and of interest to artillerymen from the earliest period. There are no other examples of guns which have remained in use for four centuries, and are still, in a very real sense, effective pieces of ordnance. They testify to the former energy and power of the Ottoman race, as no other military monument does, and remind us of an event which has had a greater influence on the politics of Europe than almost any other within the same period—the fall of Constantinople. Monuments of the military genius of Muhammad II., they remind us also of “the splendour and the havoc of the East” by their prodigious size, and cost and power. They form a class apart, and although there is reason to think that they are referable to a Flemish original, they bear the stamp of a national character and of an epoch of conquest of which European history presents scarce any other example. These cannon were formerly very numerous. M. Thevenot (1655) did not land at the Dardanelles, but as he passed he could “privately discern, with a Perspective glass (on the European side) about twenty Port-holes level with the water, in which there are guns of such prodigious bore, that besides what I could observe by my glass, I was assured that a man might easily creep into them.” The other castle (on the Asiatic side) he remarked, “hath not

¹ Substance of a memoir read before the Archaeological Institute, June 3, 1868. See p. 249, *ante*. It was subsequently published in the Proceedings of the Royal Artillery Institution, Woolwich (vol. vi.

p. 203), with notices of other great Oriental Cannon. These, it is hoped, may, by the author's kindness, be given hereafter in this Journal.

so many gun holes." Bishop Pococke, writing about 1740, reckons about 42, viz., on the north side of the Dardanelles 22, on the south 20. His description of them is the more interesting as there can be no doubt that the gun, in two parts, which, like the other, is adorned with the *fleurs-de-luce*, is the identical gun that we have lately acquired. It is as follows :—

"There are fourteen large brass cannon without carriages on the sea shore ; they are always loaded with stone ball, ready to sink any ship that would offer to pass without coming to anchor, in order to be searched ; they fire likewise with ball in answer to any ship that salutes the castle, as this does much damage where they fall, so the lands directly opposite commonly pay no rent. There are eight other cannon towards the south ; I saw among them two very fine ones, one is 25 ft. long, and adorned with *fleurs-de-luce*, which they say was a decoration anciently used by the Emperors of the East before the French took those arms, and I have seen them in many parts ; the other cannon is of brass, 20 ft. long, but in two parts, after the old way of making cannon of iron of several pieces ; the bore of this is about 2 ft., so that a man may very well sit in it ; two quintals and a half of powder are required to load it, and it carries a ball of stone of 14 quintals.² The other castle, called Rumeli Eskihissar (the old castle of Romelia), has in it twenty large brass cannon, one of which is of great size, but not so large as that on the other side."

A more recent Prussian traveller, Major von Molke (1829), says that there are "63 kamerliks or guns which throw stone balls, some of which weigh 1570 lbs. weight." "These gigantic guns," he adds, "are some of them 28 inches in diameter, and a man may creep into them up to the breech. They lie on ground on sleepers of oak, instead of gun carriages, and their butts against strong walls, so as to prevent recoil, as it would be impossible to run them forward in action. Some of them are loaded with as much as 1 cwt. of powder."³ 1570 Turkish chekies are equivalent to about

² A quintal is 110 *rotoli* of 144 drams, or 1·00 lb. avoirdupois, according to some authorities. Tate makes the *Rotolo* 180 drams or 1·27 lb. (Modern Cambist.) Von Hammer says, "Moi même j'en ai vu un aux Dardanelles : sa bouche était

si vaste, que peu de temps avant mon arrivée, un tailleur poursuivi pour dettes s'y était blotti et y resté caché pendant plusieurs jours !" Liv. ii. p. 514.

³ Quoted by Mallet.

1050 lbs. avoirdupois, a stone shot of this weight would have a diameter of 31·7 in. ; as the largest calibre mentioned by this officer, 28 Prussian inches, is equivalent to only 28·8 English inches, it is possible that the stone shot of 1570 (Turkish) lbs. were intended for a gun not seen by him ; but the discrepancy is not greater than may arise from the vagueness of the original unit, the *kantar*, when applied to stone shot. Of the primitive mode of mounting which he describes we have many examples.

At the present time there are only 18 of these guns left, including the one recently presented to Her Majesty, and I am indebted to Mr. Wrench, H.M. Vice-Consul at the Dardanelles, for being enabled to give a list of them ; it includes also three that have been recently broken up.⁴ See Table I., on the next page.

Mr. Redhouse has supplied the following translation of the four inscriptions on Nos. 8, 9, 12, and 21 (date A. Heg. 928, or A.D. 1521-22). The first line is in Persianized Arabic, Persian, and Turkish, the last two in Arabic, the engraved inscription in modern Turkish.

"The work of Mustafa son of Murad, Chief Gunner."—"And in the time of Sulayman Shah the just."—"I made the guns for the destruction of forts."—"The chronicler said of the great gun,—‘This is one of the houses, judge thou then as to the palaces.’

"The last line," he adds, "is an allusive quotation. The letters added together in their numeral values should give the date, but do not in any way I can see. The quartet is a chronogram, but a false one. There are several mistakes made by the moulder or the copier, which I have indicated ; all the long inscriptions are verbatim copies of this."

This difficulty as to the chronogram has given a great amount of trouble. There seems to be certainly a mistake in the work ; Mr. Wrench wrote thus in May last :—"The inscription which has been puzzling me in common with the scribes here for so long a time is not even yet satisfactorily deciphered. I went some little time ago with one of the

⁴ In Table I., N signifies that the gun was, in January, 1868, in the Fort Kilit Bahar on the European side of the Dardanelles Straits. S that it was in the Sultanieh Fort of Chanak Callessi. on the Asiatic side of the Dardanelles Straits.

Many of the guns have the weight of shot marked in *kantars* only ; I have reduced these to *okes*, at 44 *okes* = 1 *kantar*. In others it is marked in *okes*, not in *kantars*.

TABLE I.—LIST OF GREAT TURKISH GUNS EXTANT IN 1868.

No.	Place.	Date.		Designation in kantars.	Dimensions.			Modern Turkish charge.			In English measures.		Remarks.
		A. H.	A. D.		Cal.	Diam. of chamber.	Length.	Powder okes.	Shot.		Charge of powder.	Stone shot.	
									Kantars.	Okes.			
1	N	—	—	10	in. 29·5	—	ft. in. 14 5	25	10	440	lbs. 70·7	lbs. 1245	} The work of Ahmet, son of Abdul, the chief gunner.
2	N	—	—	10	29·0	—	14 2·5	25	10	440	70·7	1245	
3	N	—	—	8·5	27·5	—	13 10	20	8½	374	56·6	1058	
4	N	—	—	8	27·0	—	14 1·5	20	8	352	56·6	996	
5	N	—	—	8	26·7	—	12 4·5	20	8	352	56·6	996	
6	N	—	—	7	26·5	—	13 10	20	7	308	56·6	871	
7	N	—	—	5·5	26·0	—	14 0	16	5½	242	45·3	685	
8	S	928	1521	5	25·5	9·5	15 6	17·5	—	240	49·5	670	} The work of Ahmet, son of Abdul, the chief gunner.
9	S	928	1521	5	25·0	9·5	15 7	17·5	—	240	49·5	670	
10	S	868	1464	5	25·0	10·0	16 7	17·5	—	240	49·5	670	} The work of Munir Ali.
11	S	—	—	5	25·0	9·5	14 0	17·5	—	240	49·5	670	
12	S	928	1521	4·6	23·5	9·7	14 0	16	—	220	45·3	620	} The work of Mustapha, son of Murad, the chief gunner.
13	S	—	—	4·5	22·5	—	16 0	16	4½	198	45·3	—	
14	S	—	—	4·2	22·5	8·1	12 9·5	15	—	200	42·5	564	The work of Khoder.
15	S	863	1458	3·7	23·2	8·5	12 8	13	—	176	37·7	498	
16	N	—	—	3·5	20·5	—	13 11	12	3½	156	34·0	—	} The work of Mustapha, son of Murad. See note, p. 280.
17	N	—	—	3·5	20·7	—	11 11	12	3½	156	34·0	—	
18	S	—	—	3·2	21·2	8·7	10 7	12	—	154	34·0	436	
19	S	—	—	3·2	21·0	8·7	11 4	12	—	154	34·0	436	
20	S	—	—	3·2	20·0	7·0	12 7	12	—	154	34·0	436	
21	N	928	1521	2·5	19·5	—	11 2·5	10	2½	110	28·3	—	
22	—	1109	1697	1·0	13·5	—	10 11	—	—	—	—	—	

No. 5. By a clerical error the bore is returned at 20·7 inches, for a shot of 8 kantars.—No. 8. *This gun is still constantly fired.* It is marked by 11 shot. It bears a second date A.H. 1126 = A.D. 1714, the epoch of preparations for war with Venice, when its weight, length, and weight of shot were inscribed.—No. 9 bears the marks of having been struck by 6 shot; and No. 10 gun is marked by one shot.

Nos. 12, 14, and 15 have been recently broken up; and Nos. 18 and 19 stand sentenced to be broken up.

No. 10 is the gun lately presented to our Government. There are only two guns of the list which date from the reign of Muhammad II., and one of them is already broken up. We possess the other. There are four of the same date, A.D. 1521, one year before the conquest of Rhodes, and possibly among those which were cast on the Island for its subjection before the siege of the Fortress, which fell December 22, 1522. These four guns, Nos. 8, 9, 12, and 21, bear the same inscription, which has been deciphered by Mr. Redhouse, a task of which the difficulty can only be fully appreciated by Oriental scholars; having seen educated natives entirely baffled by them, I may venture to call the attention of artillerymen to the obligation we are under to this eminent scholar for having on many occasions brought his great learning to bear on so apparently trivial a subject as the inscription on a gun, at the cost of not a little time and research.

most learned men here, and we copied the inscription, as I thought exactly, as it was on the gun ; this copy I sent to Mr. Hughes, our Oriental Secretary at the Embassy, and at a meeting I had with Mr. Hughes and a learned friend of his, it was shown that my copy could not possibly be correct, as the date in figures did not correspond with that in characters. They advised me to send a rubbing of the inscription, and I am in a day or two going to take one, when I trust that a satisfactory result will be obtained."

Only two of these guns are referable to the period of Muhammad II. (A.D. 1451-1481), and, although we have none exactly contemporaneous with the fall of the Byzantine Empire, one of those that have been lately broken up (No. 15) carries us to within seven years of that epoch. The interest attaching to them has been very much enhanced by the discovery at Constantinople, within these few years, of a work in MS. by a contemporary writer named Kritoboulos, in which he describes the actual fabrication of the first of Muhammad's great cannon. A part of this MS. has been translated into French by Dr. Déthier, Director of the Austrian College at that place ; through the kindness of Mr. Newton, of the British Museum, I have had access to this work, and can present a translation from it. It bears date 1467, and the portion published by the learned doctor commences thus :—

"After having distributed his troops around the walls of Constantinople (1451), Muhammad II. summoned the makers of his ordnance and discoursed with them on the guns, and on the defences, and what manner of cannon he needed the better to beat down the walls. The gunners replied that it would be easy to make a breach if they could make on the spot out of the guns they then possessed others large enough to overturn and demolish the rampart ; but that to cast such pieces a considerable outlay was necessary, and above all a large supply of bronze. Muhammad commanded at once that they should have everything they required, and on their part they made the machine (cannon), a thing terrible to look upon, and not to be believed by the hearer. But I will now explain the mode of fabrication, and the form and the use of it. They take a quantity of very fat clay, the purest and lightest possible, which they make plastic by kneading it for several days. The mass is knit together and pre-

vented from breaking by the intermixture of linen, hemp, and other shreds, and the whole well worked up and well mixed in such a manner as to make one tough and compact mass. Then they make a round cylinder, *en forme de flute*, very long, to be the mandril or core of the shape. It was forty palms in length, the front portion of gun proper was twelve palms in circumference. The rear portion, that is to say the chamber intended for the reception of the powder (*l'herbe*), was four palms, or a little over, in circumference, according to the rule of proportion to the rest of the gun, that is to say, one-third.

"Another exterior shape, to receive the first, was next made ready, hollow and if as intended for a sheath to the first; but, be it observed, larger, and not alone to receive the other, but such as to leave a void space between the two. This space or this interval all round between the surfaces, which is uniform, is a palm or a little more. It is the space intended to receive the bronze pouring into it from the furnace to take the form of a cannon. This exterior is made of the same description of clay, but entirely surrounded and fortified with iron, timber, earth and stones, built up round it, and intended to prevent the immense weight of the bronze from fracturing it and spoiling the cannon. Then they erected two furnaces, one on either side and close by for the foundry. These towers were very strong and fortified internally with bricks and a very fat well worked clay, and on the outside surrounded with large cut stones and cement, and everything suitable for adding to their strength. And they cast into the foundry a mass of bronze and tin, about 1500 talents. Thereupon they threw in charcoal and wood, and so disposed it that the metal was covered above and below and on all sides, and the very furnaces hidden except their outlets. Round about this were the bellows which worked without rest or intermission when the mass was once lighted, and this for three days and three nights, until the whole of the bronze, melted down and liquid, became as water. Then the outlets having been opened the bronze poured through earthen pipes into the mould until it was filled and the interior cylinder covered, and the metal one pic in depth above it. The cannon was then cast.⁵

⁵ A Turkish pic is equal to 27·9 in. If we may trust Baron de Tott, they con-

tinued to cast their guns hollow till the middle of the last century. "All the

"When the bronze had contracted and cooled down the exterior and interior moulds were taken away, and the metal which was scraped and polished glittered on all sides. So much for the fabrication and form of the cannon.

"Now I will explain to you how it was made use of. First they put into it that which is called the powder, filling the chamber behind completely up to the mouth of the enlarged part of the bore which is intended for the stone shot. Then they introduced a great stopper (*bouchon*), a lid (*couvercle*) of wood, and very strong, which they batter down with iron rammers so that it shall closely confine the powder after such sort that nothing can dislodge it if it be not the force of the inflamed powder; then they placed the stone upon it, ramming it down with force so as to make it enter into the wooden stopper and make a round cavity.⁶ After this, having turned the cannon towards the object intended to be struck, and given it an angle of inclination according to the rules of their art and of like cases, they brought great beams of wood which they laid under it, and on top and on all sides so that it might not be disturbed and strike wide of the mark by the effect of the shock and the recoil. After all this, they applied the fire to the little orifice behind, making a train of the powder. This lighted quicker than thought; first ensued a terrible muttering and a shaking of the very ground beneath and around and a strange noise, then with a lightning flash, a horrifying uproar, and a flame scorching and blackening all around, the stopper borne on by the strong hot breath thrust the stone forcibly forth and issued from the gun. Borne by an irresistible force and energy this latter struck upon the wall and instantaneously broke it, knocked it over, shattered it and crumbled it into a thousand fragments. By sending pieces in all directions it scattered death all over the neighbourhood; sometimes it knocked down all one section of the wall, sometimes half of it; sometimes more or less of one of the towers, or the

work was done in common furnaces, and the bronze burnt by the action of the bellows, and then cooled at the bottom of the basons, reached the moulds in a state of paste, their defective nature adding to the imperfection of the piece produced. I proposed to establish a reverberatory furnace, and a boring ma-

chine. The idea of casting without bellows, of casting solid, and then boring, provoked the laughter of the Turkish founders."—De Tott's *Mémoires*, about 1790, pt. III., p. 98.

⁶ This proves that the wad was raised at the edges, and concave.

great wall between two towers, or the battlements. There was nothing so hard, or so mighty, or so heavy, even in the strongest wall, as to be able to resist a shock like this, or ward off such a missile.⁷ Thus inconceivable and incredible is the nature of this machine. The ancient princes and generals did not possess and had no knowledge of such a thing; for if they had had it, no city could ever have resisted their attack, and they would not have had such trouble to breach and destroy their walls, and the very strongest would have been no obstacle to them. They were obliged to raise mounds against them, to gird them with trenches and lines of circumvallation, to dig mines and galleries to get below the walls, and to do many like things all to make themselves masters of cities or fortresses. With cannon all this would have been done quicker than thought; they would have easily battered and overturned the walls; but they had them not. It is a new invention of the Germans, or of the Kelts, made about 150 years ago or a little more.⁸ It is an ingenious and happy discovery, especially the powder, which is a composition made of the element most hot and most dry—of saltpetre, of sulphur, of charcoal, and of herbs, from the which composition is generated a dry hot gas, which being inclosed in the narrow rigid and unyielding body of bronze, with no other means of escape than the one left it, opens this by its internal pressure and gives such velocity to the stone that sometimes the very bronze is ruptured. For the rest, our old language has no word to designate this machine unless you choose to call it, *ἐλιπολος*, taker of cities, or *ἀφέτεριον*, the bolt-compelling. In current language now-a-days all the world give it the name of *σκέυη*, machine, baggage. So much for the description of this cannon, as we have been able to learn, seeking the information among those who make a profession of artillery."

Dr. Déthier, the translator of the unpublished MS., pro-

⁷ A French writer quoted by the Emperor of the French, in the "Études sur le passé et l'avenir de l'Artillerie," II. p. 95, and who was present (he does not name him), describes the defences of Constantinople as follows:—"Les murs devant le Turc sont très gros et hauts, et dessus y a barbacanes et machicoulis, et en dehors faux murs et fossés, et sont hauts les murs principaux de 20-22

brassées et larges, en eaux (haut), en aucun lieu 6 et aucuns lieux 8 brassées. Les faux murs en dehors ont le terrain haut de 12 brassées, le mur dessus haut de 14 brassées et gros de 3 brassées. Les fossés sont larges de 26 brassées et profonds de 10."

⁸ This early author therefore gives 1317, or a little earlier, as the date of the invention of gunpowder.

ceeds to draw a comparison between the gun of Muhammad and the American 20-in. Rodman gun, which is of no great interest ; but he subjoins a further extract from the same MS. in support of the claim of Muhammad II. to the first employment of vertical fire. "After having given," he says, "an interesting account of the attack on the chain and vessels which defended the entrance of the Port of the Golden Horn, and the necessity the Turkish Admiral Baltoglou was under to retire without any result," the author proceeds :—"But the Emperor Muhammad, beholding the repulse of this attack, turned his attention to the invention of another machine. He called together those who made his guns and demanded of them if it were not possible to fire upon the ships anchored at the entrance to the port, so as to sink them to the bottom. . They made answer, that there were no cannon capable of producing such an effect ; adding that the walls of Galata hindered them on all sides. The Emperor then proposed to them a different mode of proceeding, and a totally new description of gun, of which the form should be a little modified so as to enable it to throw its shot to a great height that in falling it might strike the vessel in the middle and sink her. He explained to them in what manner, by certain proportions calculated and based on analogy, such a machine would act against the shipping. And these on reflection saw the possibility of the thing ; and they made a species of cannon after the outline which the Emperor had made for them. Having next considered the ground, they placed it a little below the Galata Point on a ridge which rose a little opposite the ships. Having placed it well, and pointed it in the air according to the proper calculations, they applied the match, and the mortar threw its stone to a great height, then falling it missed the ships the first time and pitched very near them into the sea ; then they changed the direction of the mortar a little, and threw a second stone ; this, after rising to an immense height, fell with a great noise and violence and struck a vessel midships, shattered it, sunk it to the bottom, killed some of the sailors and drowned the rest, only a few saved themselves by swimming to the other ships and nearer galleys."

Kritoboulos affirms that the order to make the mortar was given four or five days before the Latin fleet arrived,

that is to say, about the 17th April; and we learn from Nicholas Barbaro⁹ that a Genoese ship was sunken by a bombard on the 5th May, leaving only eighteen days for the manufacture of the piece, a period that seems hardly sufficient, even allowing for the terrible stimulus which must have been given by the chastisement of the Admiral Baltoglou to all who had the orders of Muhammad to execute.

The Turkish habit of casting great ordnance on the spot where they were wanted shows an extraordinary energy and readiness. In the first siege of Rhodes, 1480, Muhammad caused sixteen great pieces to be cast, called basilisks or double cannon, 18 ft. long, and carrying a ball of 2 or 3 ft. diameter;¹ and here also we are told that their mortars "threw stones of a prodigious size, which, flying through the air by the force of powder, fell into the city, and lighting upon houses, broke through the roofs, made their way through the several stories, and crushed to pieces all that they fell upon; nobody was safe from them, and it was this kind of attack that gave the greatest terror to the Rhodians."

There is some little difficulty in determining the actual size of the gun cast by Urban, nor is it clear whether our description relates to that gun or to another. Gibbon states that the great cannon was flanked by two fellows of almost equal magnitude, one of which is described by a contemporary writer, Leonardus Chiensis, as throwing a stone ball of eleven palms (104·5 in.) in circumference; he measured the shot,—"*Lapidem, qui palmis undecim ex meis ambibat in gyro.*" This would give a diameter of about 33·2. But it is further stated by all authorities that the great cannon was cast in Adrianople, whereas our account seems to refer to one cast in front of Constantinople. "At the end of three months Urban," says Gibbon, "produced a piece of brass ordnance of stupendous and almost incredible magnitude; a measure of twelve palms is assigned to the bore, and the stone bullet weighed about 600 lbs." He adds "that it took two months to transport it from Adrianople to Constantinople, a distance of 150 miles." Here again Phranzas steps in with a correc-

⁹ See Von Hammer.

¹ Relation de Merry de Dupuy, quoted

by Vertot, "*Hist. of Knights of Malta*," i. 378.

tion, and says the shot weighed 1200 lbs., "*Lapide in eâ estimatione mille ducentarum librarum*," and mentions as an eye witness that it was drawn by 50 oxen to Constantinople. It is probable therefore that the statements relate to different guns. Assuming, however, that one of the guns fired stone shot of 1200 lbs., we have still to enquire what the pound was. The most reasonable supposition is that it was the weight now known as the *chekie*, which is nearly the Roman pound; if so, the shot of 1200 chekies weighed about 804 lbs. avoirdupois, corresponding to a diameter of 25.6 in. The piece would, in fact, have been a piece of seven kantars.

In regard to its weight, Muhammad, as we are told, delivered 1500 talents of bronze to the founders, but we are met by the same difficulty of determining what the talent was, or rather which of its many values to select. If the Roman talent was carried to Byzantium, as seems probable, and remained in use to the fifteenth century, we may assume that it equalled 57.6 lbs. avoirdupois, and this agrees with the statement of Leonardus Chiensis quoted by Gibbon,² that the talent equalled 60 minæ, or nearly 60 avoirdupois pounds; on the other hand, it is expressly stated by Von Hammer that "*le talent pèse cent vingt cinq livres*," or in fact was the same as the kantar.³

For purposes of rough calculation we may assume the talent intended as equivalent to our half-hundred weight, when the quantity comes to 37.5 tons; some allowance must be made for dead-head and unavoidable waste, and we cannot expect from this quantity a gun weighing more than 32 tons, which is perfectly irreconcilable with a bore 12 palms or 34.5 in. in circumference. Such a gun, if made of the other dimensions stated, would in fact weigh over 100 tons, a bulk beyond the bounds of credibility, and we must be content to know that the Turks had in the fifteenth century guns discharging stone shot of more than 33 in. diameter, the authority of contemporary writers being supported by the existence of two guns of a size not much inferior to this

² See Mr. Mallet, in "*Engineer*" of Aug. 21, 1868. "The attic talent weighed about 60 minæ or avoirdupois pounds (see Hooper on ancient weights and measures): but, among the modern Greeks, that classic appellation was extended to a

weight of 100 or 125 pounds (Ducange, *τάλεντον*.)" Milman's Gibbon, 1839, xii. 192. Ducange gives examples of *Talentum pro centum libris*; *pro 50 libris*: *pro libra et marca*: but not for 125 lbs.

³ Von Hammer, liv. xxii., n. v.

day, namely, 29 in. and 29·5 in.; the other particulars of their length and weight are open to question.

It is evident that our gun was cast on its face, the dead-head being left at the breech end and hewn off with axes, probably while the metal was hot. The axe-marks are plain; similar marks may be observed on other early guns which have the breech cut off square, for example, No. 201 of the Catalogue of the Museum of Artillery, in the Rotunda, Woolwich, which is dated A.H. 937, or A.D. 1530.⁴

I have referred to the singularity of guns three or four centuries old taking part in modern engagements. The most memorable instance of this was afforded in the passage of the Dardanelles by Sir John Duckworth's squadron in March, 1807, when the following vessels were struck:—"Canopus." Wheel carried away: hull much damaged; 3 seamen wounded.—"Repulse." 10 killed and 10 wounded by one stone shot from the Asiatic side.—"Royal George" (Sir J. Duckworth.) A stone shot stuck fast in her cutwater. It is not stated what damage was due to this projectile, but she lost 3 killed and 27 wounded.—"Windsor Castle." Mainmast nearly cut in two by a stone shot of 800 lbs. She lost 3 killed and 13 wounded.—"Standard." Struck by a stone shot from Sestos of 770 lbs., 26 in. in diameter, which killed 4 men and led to a succession of disasters by which 4 more lost their lives, and 49 were wounded.—"Active." Was struck by a granite shot 78 in. in circumference, and said to have weighed 800 lbs., but no one was hurt. It was this shot that made so large a hole in the side that the Captain, looking over to see what was the matter, saw two of his crew thrusting their heads through it at the same moment: there is an exaggeration, however, about the weight of it, perhaps the boatswain put his foot in the scale; a ball 78 in. in circumference will be rather under 25 in. in diameter, and not weigh more than 760 lbs. There are two of these stone shot preserved at the Tower, one of them, 24·5 in. in diameter, weighs 744 lbs.; the other, 19·7 in. in diameter, weighs 586 lbs.⁵ The shot which accompanied the gun to be described, average 75·7 in. in

⁴ Official Catalogue, p. 29.

⁵ Several of these shot, as we are informed by Mr. C. Tucker, are still remaining on the piers of the entrance gates at

Wear near Exeter, the seat of Sir J. T. B. Duckworth, Bart. One or more some years since were mischievously dislodged and thrown into the river Exe.

circumference, or 24·1 in. in diameter, and weigh 672 lbs. very uniformly; their material is granite.

One of the most interesting documents that has come down to us is an account, given in one of the notes to Von Hammer's History, of the pieces of ordnance placed in battery against Scutari in Albania, in 1478. There are no less than 11 guns enumerated,⁶ throwing stone shot increasing in weight from 3 to 13 kantars; the kantar is a well-known weight equivalent to 44 okes, each oke 2·83 lbs. avoirdupois, consequently the kantar is equal to 124·5 lbs. avoirdupois. Upon this datum I have constructed the following Table. It will be observed that there are only two guns exceeding in size those actually known to us, and that the calibres follow pretty closely the scale afforded by the guns now extant, as given in Table I.

TABLE II.—GUNS PLACED IN BATTERY AGAINST SCUTARI, IN ALBANIA, BY MUHAMMAD II., A.D. 1478.

Cannon shooting a stone shot of kantars.	No.	When ready, 1478.	Computed diameter of stone shot.	Probable diameter of gun.	Computed weight of shot.
3		22 June	19·8	20·8	lbs. 373
4	2	22 " }	21·8	22·8	498
		26 " }			
6	2	6 July }	24·9	25·9	747
		8 " }			
6½	1	26 June	25·6	26·6	810
7	1	7 July	26·3	27·3	871
9½	1	11 " }	29·0	30·0	1182
		6 " }			
12	5	7 " }	31·4	32·4	1494
		7 " }			
13	1	8 " }	32·4	33·4	1640

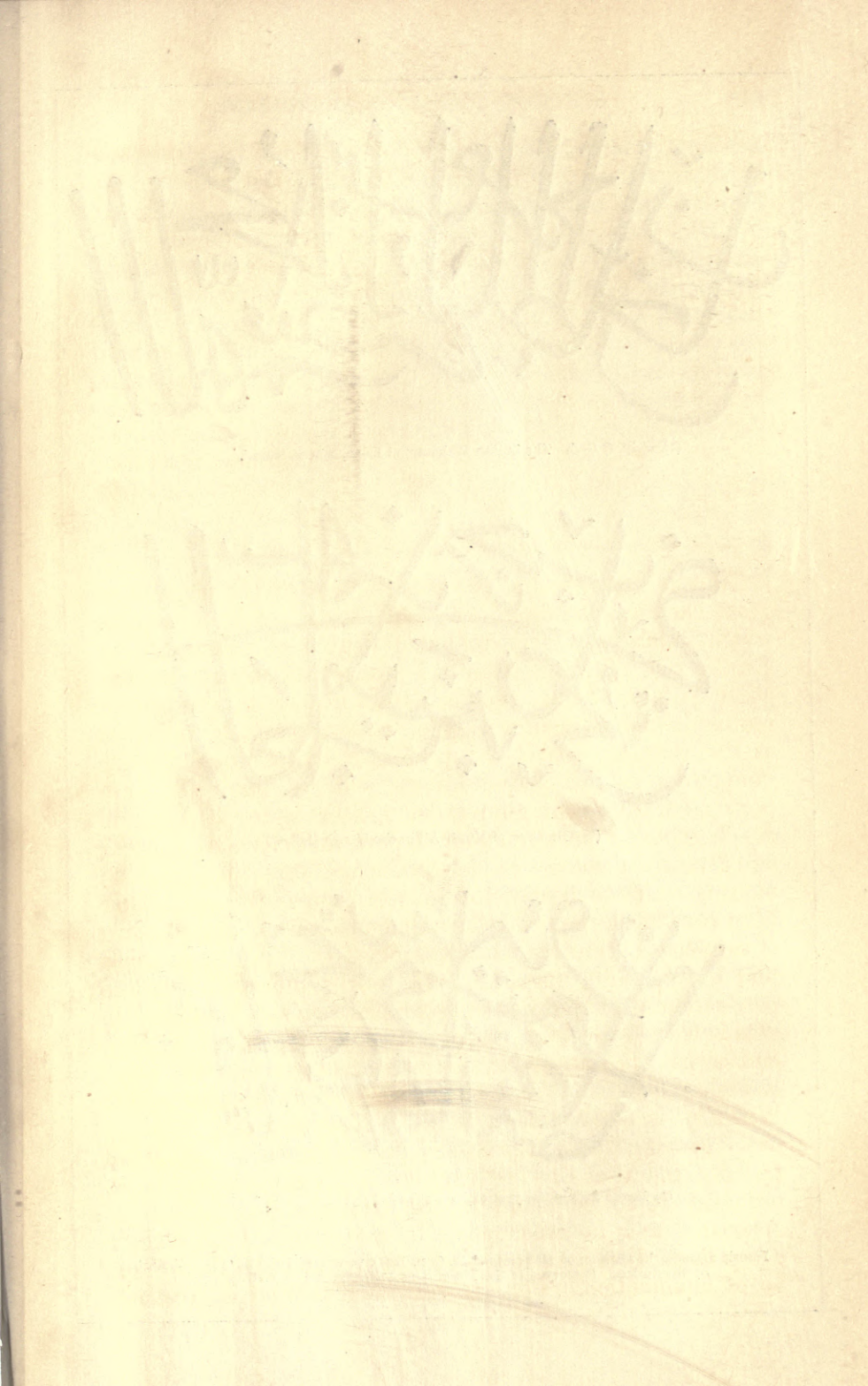
Confined as they were to the use of stone for their projectiles, in the impossibility of casting large spheres of iron, the Turks, whether they knew it or no, acted in accordance with sound principles, in preferring very large masses of that material, launched with low velocities, to smaller masses launched with such velocities as they might have obtained: the former performed their work and transmitted their whole force to the object struck; the latter would have probably broken up and great part of it been lost.

⁶ Von Hammer, iii. p. 42. He quotes Barletius.

We are furnished by the same document with a return of the number of shots fired each day, which I subjoin :—

Date 1478.	Guns in battery.	Fired shots.	Date 1478.	Guns in battery.	Fired shots.	Date 1478.	Guns in battery.	Fired shots.
June 22	2	7	July 2	4	35	July 12	11	187
" 23	2	9	" 3	4	44	" 13	11	183
" 24	2	8	" 4	4	47	" 14	11	168
" 25	2	7	" 5	4	4	" 15	11	187
" 26	4	29	" 6	6	42	" 16	11	182
" 27	4	28	" 7	8	57	" 17	11	194
" 28	—	—	" 8	10	42	" 18	11	131
" 29	4	1	" 9	10	76	" 19	11	193
" 30	4	34	" 10	10	104	" 20	11	148
July 1	4	36	" 11	11	178	" 21	11	173
Total ...								2534

Thus it appears that towards the end of the siege these great cannon discharged 16 shots a day each, a number which indicates a very tolerable degree of manageability. At the risk of being tedious, I cannot but remark on two other points. First, the immense supply of gunpowder required, and its sources. We are not precisely informed of the charges, nor is the precise constitution of Turkish gunpowder at this period known, but we know the proportions of European gunpowder a little later; it consisted of—saltpetre, 4 parts, sulphur, 1 part, and charcoal, 1 part; and I take the charge at one-fourth the weight of the shot: on this estimate nearly 250 tons of gunpowder must have been consumed, requiring for its manufacture about 167 tons of saltpetre. Montecuculi, speaking of the Turk as he knew him about 1660, remarks, "He works incessantly at the production of gunpowder in every place on the frontier. He gets it from Cairo and Egypt; he buys it of the Christian, and he has such an abundance of it that he consumes more in useless firing and display than we do in necessary services. When he is conducting a siege, or in a campaign, they cry every evening during the hour of public prayer, *Halla, Halla* (Allah), and after this cry they fire a general salvo of what ordnance is to be found in the trenches, in the lines of approach, and in other parts of the camp. This occurs every day. It is easy to see what a consumption there must be of ammunition. For the rest, their powder is excellent,



(1) Help, O God. The Sultan Muhammad Khan, Son of Murad.

(2) The work of Munir Ali in the Month Rejeb.

(3) In the date of the year eight hundred sixty eight (A.D. 1464).

Inscriptions on the Cannon of Muhammad II. (A.D. 1464), presented to H.M. Queen Victoria by the Sultan. Preserved in the Museum of Artillery, Rotunda, Woolwich.

as appears by the noise of the report, the force, and the reach of the shot (*longueur des coups*)."⁷ A similar barbaric abundance, and doubtless waste, must have characterized their employment of gunpowder from the very first. I imagine that this supply must have been obtained, as the Turks have obtained it at later periods of their history, by levying a tax to be paid in saltpetre over whole provinces. Nitrate of potash is produced in an impure state pretty extensively in warm climates, and the production may be augmented by artificial means. It would be interesting to discover how the receivers discriminated between this salt and others very like it.

The other observation that I have to make relates to the provision of stone shot. Upon the supposition that the guns all fired alike, and in total proportion to the number of days they were in battery, the expenditure will be about as follows :—

Shot of 19·8 inches or 373 lbs.	310	Shot of 26·3 inches or 871 lbs.	190
„ 21·8 „ 498 „	580	„ 29·0 „ 1182 „	190
„ 24·9 „ 747 „	420	„ 31·4 „ 1494 „	400
„ 25·6 „ 810 „	230	„ 32·4 „ 1640 „	214
Total, 2534.			

The whole weighing about 1000 tons ; now the transportation of 1000 tons of stone shot with the army is out of the question. They must have been cut on the spot, and one is lost in astonishment at the prodigious labour of quarrying the blocks and cutting them into a spherical form. A single shot of 24 in. offers $12\frac{1}{2}$ square feet of surface to be dressed, and they are generally extremely well cut. The misery of the wretched slaves condemned to this labour must form a heavy item in the huge aggregate of human suffering which lies to the charge of Muhammad the Conqueror.

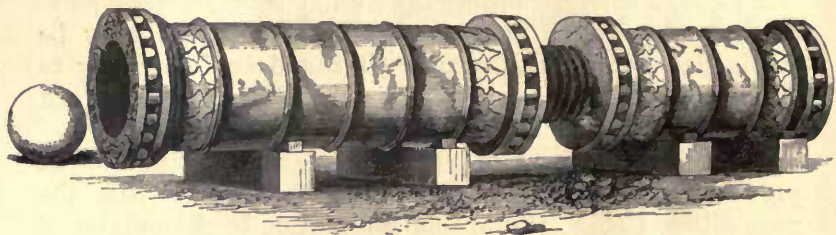
The gun recently received at Woolwich bears three ancient inscriptions, of which representations are given.

The extremely intricate character of Turkish caligraphy introduces some uncertainty in regard to the proper name. Mr. Redhouse, who at first read Munēr, was then inclined to prefer Minbir, a word which signifies Pulpit. His excellency Halil Pasha, Grand Master of Artillery, read Munir, and

⁷ Memoires, &c., Montecuculi, I. Bk. II. Ch. ii.

Efflatoun Pasha, on recently examining the gun, was equally positive that the name cannot be so read, but may be Mēner.

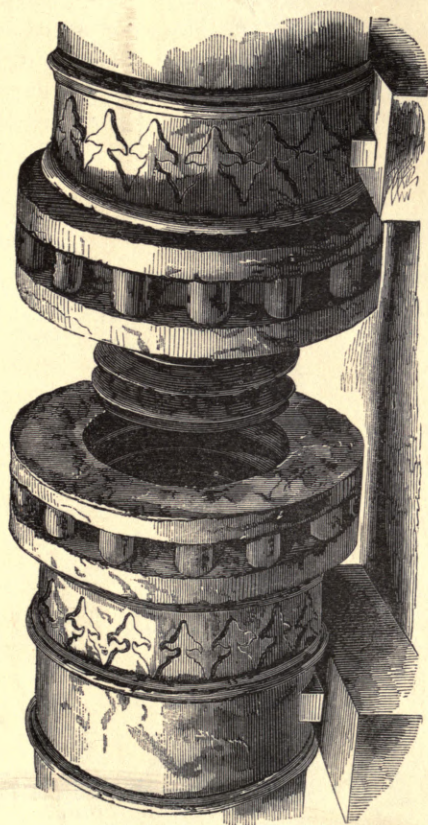
The gun is made in two parts, which screw together, each weighs 8 or 9 tons; no description can do justice to the massive character, the grand simplicity which belongs to this great piece of ordnance. The external form is a cylinder,



Cannon of Muhammad II. (A.D. 1464) presented to H.M. Queen Victoria by the Sultan.
Museum of Artillery, Woolwich.

the muzzle being as large as the breech; but either half is relieved by a boldly projecting moulding at each end, which is divided transversely by 16 cross bars into as many recesses. Considered only as ornaments, these have the happiest effect, but they were made with a design. They answered beyond doubt the purpose of the holes in a capstan head, and were used to give a purchase to the levers employed in screwing the two parts together. A precisely similar provision of capstan holes in Mons Meg and in the great bombard at Ghent has often puzzled observers. I have no doubt that those pieces also are made in two parts, and screwed together; and, although the oxidation of the iron might make it more difficult to unscrew the former than it was found to be to unscrew Muhammad's gun, it might be done. There is nothing new in the fact of the gun being screwed together, similar examples are referred to by General Favé,⁸ and engraved by St. Remy; but a very considerable degree of mechanical skill and precision was required to cast two screws of 23 in. diameter, which should fit one another, and so to unite such ponderous masses. There is no appearance of tool-work; in fact, a tool could only smooth away minor inequalities of surface, and could not

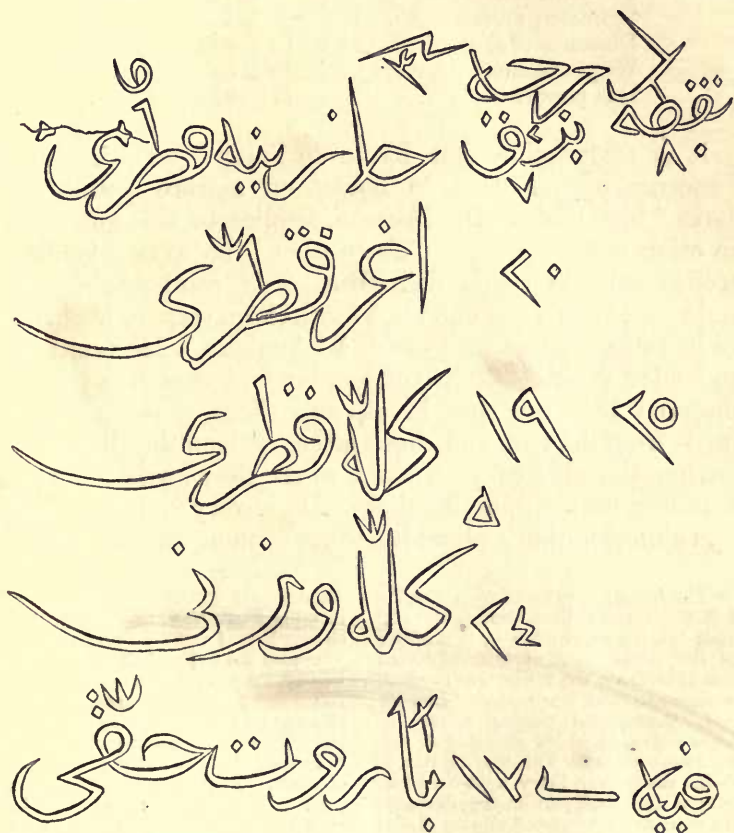
⁸ *Artillerie*, tom. iii. p. 168.



The Great Cannon of Muhammad II., A.D. 1464. Museum of Artillery, Woolwich.

alter the distance or pitch of the threads, on which the fit depends. We can only suppose that moulding-pieces were first cut in wood and nicely fitted, and then applied to the clay moulds. We have a palpable application of moulding-pieces in the ornamentation, called by Dr Pococke "*fleurs-de-luce*," which will be noticed at each end; the marks where the moulds joined are still to be seen. The only other ornament attempted is the subdivision of the cylindrical part by bold rings or mouldings about 14 inches apart.

There is a modern inscription of considerable interest in the neighbourhood of the vent, for a translation of which I am indebted to the distinguished Orientalist, Mr. Redhouse.



We have here the practical rules for the employment of the gun in the situation which it occupied for three or four

centuries at the mouth of the Dardanelles. Their modern origin is proved by the small charge of powder laid down, for the chamber was made to hold about 150 lbs. of the powder of the period; but the greater strength of the powder of modern times has made it necessary to reduce the quantity to $49\frac{1}{2}$ lbs. I think it probable that the inscription was cut by the European, I believe a Prussian officer, who some forty years ago was employed to mount the guns at the Dardanelles on modern carriages. Each of the cannon enumerated in Table I. has an inscription of the same nature.⁹

3 degrees.

Diameter, chamber	7 inches, 80 points,
Diameter, muzzle	20 inches,
Diameter of shot	19 inches, 25 points,
Weight of shot	240 okes,
Due powder	$17\frac{1}{2}$ okes,

It is remarkable that Baron de Tott's description of the "enorme perrier dont le boulet en marbre pesait 1100 livres," like that of Dr. Pococke, applies to this gun, and to no other now existing. "Cette pièce," he says, "fondue en bronze sous le regne d'Amurat, était composée de deux morceaux réunis par une vis, à l'endroit que sépare la chambre de la volée, comme un pistolet à l'Anglaise." He relates how he loaded it with 330 lbs. of powder and discharged it. He observed that the shot break into three pieces about 600 yards from the gun, and these pieces crossed the Dardanelles, leaving the surface in a foam where they struck, and went bounding up the opposite shore. He is very vague, or rather says almost nothing, about the other cannon, and his authority

⁹ The following extracts from the log of H.M.S. *Terrible*, Capt. Commerel, C.B., detail the measures taken by that officer for the embarkation of this ponderous piece of artillery, and the manner in which he unscrewed the two parts. "Jan. 10, 1868. Commenced rigging a pair of sheers outwards, which consisted of two two-decker topsails, with topping lifts of stream chain over lower mast-head and into the main deck port on opposite side. The same day commenced rigging similar sheers on those topping lifts, two parts of an eight-inch hawser, set taut to the stream anchor, backed with timber, &c. Jan. 16. Hoisted out $6\frac{1}{2}$ ton gun, and landed it in paddle-box boat. Jan. 17.

Hoisted out 12-ton gun, and landed it in same boat. Jan. 18. Hoisted in the shorter half of the large gun, and in the afternoon the longer half. The fall used was $6\frac{1}{2}$, the blocks, threefold, 24 each. It was found necessary to unscrew the gun; this was performed by means of the lever jacks of ten tons, and capstan bars made to fit the holes cast in the gun; a power of nearly 40 tons was used for this purpose. The gear all closed remarkably well, not a rope yarn strained or spar sprung. The gear lay on the open beach at Chanak, and was very exposed to the prevailing winds. Three days would have sufficed for the operation if weather had permitted."

for the date of this one cannot be accepted. Amurath, or Murad II., was the father of Muhammad; he was the first to employ artillery, but it is impossible to transfer to him the credit which history assigns to the son for the invention of these gigantic pieces. In short, Baron de Tott cannot be implicitly relied on for the age or the size of the gun he refers to, which was beyond a doubt the one we now possess, or for the charge he employed with it. The chamber does not hold half the quantity.

I have observed that Muhammad's cannon were probably copied from a Flemish original. This will appear on comparing our gun with the great bombard of Ghent, the Dulle Griete, *Marguerite enragée*, which I have been enabled to do with great precision, by the aid of a drawing made by Professor Pole in 1864. The dimensions, allowing for the necessary difference between wrought-iron and bronze, correspond so closely that I cannot believe the resemblance to be accidental, and it extends to the method of construction. In both pieces the powder-chamber is in a separate forging or casting, and screwed to the body. Mons Meg presents us with a similar example on a smaller scale.¹

On a future occasion I propose to resume this subject, and to place before the members of the Institute a detailed notice both of the celebrated bombard at Ghent, to which it is believed that allusion has been made by Froissart, and also of certain oriental and other bombards of very remarkable fashion and dimensions. These notices may, I hope, prove acceptable as a sequel to my account of the great cannon, the "*Michelletes*," the relics of English warfare in the fifteenth century, at the Mont St. Michel in Normandy.²

CHEMICAL COMPOSITION OF THE GREAT CANNON OF MUHAMMAD II.

Specimens of the alloy composing the great cannon, lately presented to the British Government by the Sultan Abdul Aziz Khan, having been detached from the mouldings at either end of each part of the piece, accurate analysis was made by Mr. F. A. Abel, War Department Chemist. An abstract of his report is subjoined. (See Chemical News, Sept. 4, 1868.)

The metal was found to be more or less thickly coated with suboxide of copper, which had passed into carbonate here and there. In some parts, where the porosity of the metal had been considerable, the oxidation had proceeded to depths varying from 0.2 to 0.5 of an inch, and

¹ See a Memoir by Mr. Hewitt, Arch. Journ., vol. x. p. 25.

² See Arch. Journ., vol. xxii. p. 137.

even upwards. The alloy was found to vary greatly in hardness; the specimens differed also considerably in color, some presenting the usual appearance of gun-metal of good quality, whilst in their immediate vicinity were patches of white alloy rich in tin, such as are observed in bronze castings in which the mixture of metals has been imperfect, or which have been allowed to cool very slowly. Again, other portions more nearly resembled pure copper in color, and were comparatively soft. The proportions of copper and tin in the several samples analysed varied from 89·58 per cent. of copper, and 10·15 per cent. of tin; the maximum of copper being, in one of the samples, 95·20; this was from the moulding at the muzzle. In three instances the proportions of copper were higher than have been found in any other specimens of ancient gun-metal. The large Bhurtpoor gun at Woolwich, cast in 1677, contains from 60·5 per cent of copper in different parts of the gun; a large bronze gun also at Woolwich, cast at Florence in 1750, contains 89 per cent. of copper, and about 10 per cent. of tin. The Malik-i-Mydan, or great gun of Beejapore, cast in 1648, is stated to contain only 80·42 per cent. of copper, and 19·5 per cent. of tin. It is interesting to note, that in seven specimens from the great gun of Muhammad II., traces only of other metals were discovered. Lead and iron were detected in minute quantities, also antimony and arsenic; but a careful examination for gold, silver, and zinc failed to furnish any indication of the presence of those metals.

Note to Table I., p. 264; Gun, No. 22.—This piece has been introduced from its connection with Sir J. Duckworth, by whom it was brought to England in 1807; it is, however, strictly speaking not a Bombard, but a comparatively modern Turkish naval gun for throwing stone shot. It is mounted as a trophy at Plymouth, and bears inscriptions, thus translated by Mr. Redhouse.—1. At the muzzle:—The Sultan, the champion of the faith—Mustapha Khan, son of the champion of the faith Muhammad Khan.—2. Near the breach:—The work of Hasan, chief founder of the imperial capital. A.H. 1109 (A.D. 1697-8).—3. Near the trunnions:—Weight of piece, 74 canters, 13 oggas (76 cwt); length, 14½ spans; calibre (by weight), 44 oggas (about 115 lbs.). A.H. 1126 (A.D. 1714).

The Institute is indebted to the kindness of the author for the whole of the Illustrations of the foregoing Memoir.

REMARKS ON A GEM OF THE LAOCOON.

By EDWARD SMIRKE.

IN the 24th volume of the Journal of this Society, Mr. King, a gentleman well known for his glyptological knowledge and discrimination, brought under the notice of its readers a remarkable intaglio of the Laocoon in the form of a wax impression of it attached to a deed containing a grant of the advowson, *pro hac vice*, of the church of St. Anthony, in Meneage, by the Prior and Convent of the old alien priory of Tywardreth, in Cornwall, to Thomas Arundell, "armiger." This seal, or a copy from it in gutta percha, was shown to my friend, Mr. Way, some fifteen years ago, and to several friends, both professional sculptors of celebrity and collectors of gems, and was exhibited during that interval at the meetings of more than one learned society in the hope of attracting attention and eliciting information on the apparent existence of an unknown gem, of which an impression was thus found among the papers and instruments of an obscure conventual establishment, situate near St. Austell Bay in the county of Cornwall, recording an early and well executed memorial of a group of statuary disinterred at Rome only a few years before the date of the document, and about the time when the prior named in it had become its last prior.

A printed notice of it was inserted by me in a Supplement to my friend Dr. Oliver's *Monasticon* of the Exeter Diocese, to which Mr. King has referred.

There is abundant proof that the discovery of this celebrated group of statues excited general interest, and soon became known far beyond the limits of Italy; but it is not probable that there was, at that time, any cast or copy of it in this country which was then publicly known or accessible; and I was led by the late Mr. Hertz (a well-known collector of works of art of this kind) to believe that no ancient gem on the subject existed, except a few cinquecento works which he showed to me, in which the treatment

of it was entirely different. I know not to what weight his opinion was entitled, but it was on the faith of that opinion that I ventured to describe the seal as a cinque-cento work.

Mr. King has expressed a different opinion. His belief is that the particulars, in which the gem deviates from the present restored group at the Vatican, are not accidental, or the mere product of the gem-engraver's fancy or taste, but that the gem, as represented by the seal, was either copied from the present group in an earlier and more perfect state, or was the original work of some early Greek engraver long before the finding of the existing group; and he founds this opinion on the superior technical execution of the work to that of any known engraver of the cinque-cento period.

If the peculiar execution of the seal be really decisive of its date, I am the last person to set up any opinion of my own on a matter so far beyond the range of my imperfect powers of artistic discrimination; but I rather infer that Mr. King does not speak on this point with so much confidence as to silence or exclude all question on it. Perhaps if he had then known the date of the document to which the seal was found attached, he might have spoken with more hesitation.

I have already stated that the document is a grant of the patronage of a living, of which the convent was patron, to a member of the well-known knightly family of the Arundells of Lanherne. The date is 25 May, 21 Henry VIII. (A.D. 1529), about 23 years after the discovery of the mutilated marble group in the vineyard of Felice de Fredis at Rome in the spring of 1506; a date which is fixed by contemporary letters and other early notices. It at first appeared to me (as I stated in Dr. Oliver's Supplement) that the grant, being found in a collection of title-deeds and muniments of the dissolved priory and purporting to be a grant of some property of the convent, was the identical grant by the convent, and it appeared singular that the convent seal (well known, and of a very different type) should not be attached to it; but on reconsideration and reinspection of the original by the favor of Lord Arundell of Wardour, I am satisfied that the seal was the seal of the grantee, Thomas Arundell. The deed is styled in the deed itself an "indented" one, and it is so indented along the upper edge in the usual fashion of the time, indicating that it was one of two facsimile instru-

ments written at opposite ends of a single piece of parchment. This seal is, alone, attached to it by a single strip of parchment. The regular seal of the priory was no doubt attached to the other half, and delivered to the grantee for his own use and security, and was therefore not likely to be found among any muniments of the priory. The bundle of priory instruments had long been deposited, for some unexplained reason, in the muniment room of the Arundells, though it is not known that any portion of the convent land had ever been granted by the crown to that family. We know, indeed, historically, that such a grant was very improbable. That there had in fact been some voluntary transactions, directly or indirectly, between the convent and that family *before* the dissolution, is apparent from the documents specified by Dr. Oliver in the volume of the *Monasticon* first printed, and inserted in his long list of instruments under the head of this priory.

The general practice of the Augmentation Office was, I think, to deliver the muniments of the surrendered monastery, or some of them, only to the subsequent grantee of the crown; but I can easily believe that a religious house, on the eve of its threatened dissolution, might consider it expedient to put its muniments of title into the custody of a favoured and powerful family, on whose known friendship it had good reason to rely.

As the missing deed has, after much search, been at last recovered, I have thought it worth while to print a copy of it, leaving an occasional blank where there is some obscurity or obliteration in the original; and I am the more disposed to do so, because its existence had well nigh become a matter of doubt, and because it gives me an opportunity of correcting some former observations on it made by me in the supplemental volume of the above work. I there expressed some surprise that the old prior, then on the verge of his professional extinction, should have possessed himself of an ancient gem, and employed it as the official representative of his House in the course of a strictly canonical and capitular act. That such an ornamental object should be found in the possession and use of the scion of a distinguished family, who figures, if I mistake not, among the young retainers of that magnificent Cardinal, who was himself a candidate for the See of Rome in competition with the House of the Medici in the person of Clement the Seventh,—could be a matter of no

surprise at all. In fact, he had, in various ways, abundant facilities for obtaining from beyond seas such specimens of ancient art at that time so highly prized.

In attempting to reproduce a conjectural restoration of the Laocoon group as corrected by the aid of this seal, I have only so far deviated from the disposition and arrangement of the figures, as found in the seal, as was needful to contract the distance between them on the field of the gem so as to conform to the contour and pedimental shape of the original group. The seal is, in fact, engraved on a prolate or very elongated ellipse, whose major axis is horizontal; and thus the gem engraver has thought proper to spread out the figures laterally, and to lower and recurve the right arm of the Laocoon, and has thus given to the entire group a more symmetrical and probable restoration of the original composition than that which the inferior taste and judgment of Baccio Bandinelli had led him to suggest. For the purpose of carrying out my conception, I have obtained the very able assistance of my young friend, Mr. Augustus Mulready, who has not only produced a very careful and excellent drawing, but has, as it were, corrected the Vatican restoration by entering into the spirit of the engraver of the seal. This design does not materially differ from that of Mr. King's vignette.

Eminent living authorities inform me also that this amended composition is, in itself, better adapted for practical execution, when the material is marble, than the less graceful conception of the last restorer, whoever he may be.

Such are the grounds on which I venture to believe that the intaglio, used for this seal, was the work of a skilful artist, who had no other guide than the group in its mutilated state, sometime between the year 1506 and the year in which the design of Baccio Bandinelli was actually carried into execution. This must have been before the year 1544, which is the date of the edition of Marliani's Topography of Rome, which contains the earliest woodcut of the group as first restored by him. The edition of 1534 has no such engraving.

There is in truth considerable practical difficulty in ascertaining either the authorship or the date of the changes which the group has undergone since 1506. The original state of it at the time of the discovery is probably correctly repre-



Geo. E. Mulready

sented in a well-known and nearly coeval engraving ascribed to Marc of Ravenna, one of the pupils of Marc Antonio. The parts, which have been since added by some later sculptor, are fully described by Mr. George Scharf in his Guide to the Greek Court Catalogue of the Crystal Palace Sculpture, and they are delineated in Bouillon's Musée des Antiques, and Clarac's Musée de Sculpture, in which the restored right arm of the Laocoon is attributed to a comparatively modern French sculptor, Girardon, in conformity with a previous one attributed to Giovan-Angelo Montorsoli.

The heads of the two serpents needed, it should seem, no restoration ; for both are represented in the group in its first mutilated state ; and there is therefore no good ground for supposing that there was another, i.e. a *third*, head near the throat of the principal figure, as Mr. King has suggested ; at least if we are entitled to assume that the figures now at the Vatican are those which the engraver of the seal had in view. Mr. Mulready executed another drawing for me, in which this suggestion of Mr. King was attempted to be carried out ; but it required a complete reversal of the position of both serpents, and other changes too considerable to be reconciled with the rest of the figures *as actually found*. I have, therefore, not thought it worth while to reproduce this design on wood.

On resorting to the best authorities¹ for the names of the sculptors who are said to have been engaged in the work of reparation, I find the names of Baccio Bandinelli, of Michael Angelo himself, of G. Angelo Montorsoli, of Bernini, of Cornacchini (also a later artist), and of Girardon ; and the material used in the repairs has been described to be wax, stucco, plaster, marble, chalk, and terra cotta, by the various authorities. The Florentine copy by Bandinelli is, of course, wholly in marble. It is possible that, in the lapse of 350 years, several and successive renovations have been undergone ; but on the whole, and having regard to the ordinary principles of reasonable evidence, I regard the claim of Bandinelli to be the veritable, substantial, author of the modern

¹ The French edition of Winkelmann, printed at Paris, 2 Republic (1793), seems to be the most instructive one. The opinion of the author had at that time undergone some change ; the Italian editions of Milan, and of Carlo Fea, are largely quoted in the notes, and the

dissertations of Heyne and of Lessing are incorporated. I have also consulted the best edition of the Museo Pio Clementino ; the Life of M. Angelo by Grimm, and by Harford ; and the Topography of Rome by Marliani, and also by Platner and Bunsen, as well as the work of Mr. Perkins.

part of the group, so far as regards the right arm, to be the most trustworthy.

It ought not, however, to be overlooked that there are some grounds for believing that the mutilated remains of other and different copies of the same group, on a different scale, had been before found at Rome, of which the existence is mentioned both by Winkelmann, and by Montfaucon in his *Diarium Italicum* (*Antiquité Expliquée*. Suppl., vol. i.).

It is observable that Pliny is not very clear on the point whether he means that the work in the Bath of Titus in his time was the identical group executed by the three Rhodian sculptors several Olympiads before the birth of Titus, or was only a facsimile copy of it, perhaps the work of a Greek artist afterwards settled at Rome. The reference by him to the supposed single block of marble looks as if he assumed the work to be the real "original" production of Greek (Alexandrian ?) date, transported by the Roman conquerors, as they were wont to do, to Rome. The group of Dirce and the Bull, also described by Pliny as made of a single block, is stated by him to have been itself brought from Rhodes to Rome in the time of Augustus.

There are some observations not immediately connected with the principal subject of this paper, which occur to me to make in connection with the convent, and with the ancient family whose name we find associated with it in the above document.

Among the muniments of the priory, which are several hundreds in number, I find one which purports to grant to *John Arundell, Esq.*, eldest son of *Sir J. Arundell, Knight*, and to two others (probably trustees), the next presentation to the church of *St. Austell*, also in *Cornwall*. Like the grant of *St. Anthony* to *Thomas Arundell*, it has only one seal attached, accompanied by an *apparently autograph subscription* by the grantee, *Jno. Arundell*. It is plain that this must be a counterpart, though called a "scriptum" only and not an indenture. The seal is not the convent seal, but one in a finger ring, which was doubtless the property of *John Arundell*. It is remarkable that the seal is a well-executed, but fanciful, one, perhaps with some mystic meaning, and represents what seem meant for a lion, a crab, and a small mirror. The date of this deed is 20 March, 1530 (in

words, not figures), i. e. 21 Henry VIII. It is, therefore, nearly of the same date as the one sealed with the Laocoon seal. Copies of the seal, made fifteen years ago, are in the possession both of myself and of Mr. Way, and the deed has not been lost; but is now in the possession of Lord Arundell with the original papers. The autograph signature serves to identify the ownership of the signet ring, and to confirm what I have already stated, that the instrument is a counterpart, as in the case of the Laocoon deed.

At the present time the subscription of the name of a grantee would be a matter of course in a counterpart. At the time of this grant it was not a very usual, or a necessary practice; and, so far as my experience extends, the reign of Henry VIII. was about the time when the practice of autograph subscription in addition to a seal was coming into use. It was, indeed, a marked period in our history as to art, architecture, and legal forms; a sort of line of demarcation between the outgoing and the incoming law, about to be followed, in the next century, by the great living land-mark of Lord Chief Justice Coke, whose works constitute a real wall of separation and transition between the living and the dead jurisprudence.

Again. I find another curious document of a rather earlier date. It is a licence given by the same Prior Colyns to Richard Wencote, dated on 5 February, A. D. 1517.² Wencote then was, or had lately been, one of the monks of Tywardreth and a priest, and the licence enabled him to go to Rome with the utmost expedition, "*cum per magnâ celebritate,*" and there to obtain from the Pope liberty to visit the holy places at his pleasure, "*in fulfilment of his pious and meritorious vows.*"

Now it may be that the sole object of this visit to Rome was only of a professional or religious character; but it is certain that, if the worthy envoy happened to be a man of taste, or had learned at the court of Leo of this famous monument of Rhodian art, of which the praises were at that

² The indorsement on this parchment is, I think, in the handwriting of the late Mr. Michael Jones, a well known record agent, formerly engaged by Lord Everard Arundell in arranging and describing his

lordship's ancient muniments. The date of it is clearly 1517, and not 1507, as Mr. Jones has described it. I think also that the name of the bearer is mis-read by him "*Wernecote.*"

time sung by Sadoletus in verses of no mean merit, he might have been tempted, or perhaps was duly commissioned by the Prior or his friends at Lanherne, to make an investment in the purchase of such ornamental specimens of glyptographic art as the two signets of which the wax impressions are now before me.

“ Artifices magni !
 Vos rigidum lapidem vivis animare figuris
 Eximii, et vivos spiranti in marmore sensus
 Inserere aspicimus, motumque iramque doloremque,
 Et pene audimus gemitus. Vos obtulit olim
 Clara Rhodos : vestræ jacuerunt artis honores
 Tempore ab immenso, quos rursus in luce secundâ
 Roma videt, celebratque frequens, operisque vetusti ;
 Gratia parta recens.”

Sadoleti Carmina.

APPENDIX OF DOCUMENTS MENTIONED IN THE FOREGOING MEMOIR.

1. Grant to Thomas Arundell of the next presentation to the Vicarage of St. Anthony in the district now called Meneage.

Omnibus Christi fidelibus ad quos presens scriptum indentatum pervenerit Thomas Colyns Prior domus et ecclesiæ Sancti Andreae Apostoli de Tywardreth et ejusdem loci conventus veri patroni vicariæ ecclesiæ parochialis Sancti Antonii in Maneck in com. Cornubiæ Exoniensis diocesis salutem. Sciatis nos prefatum priorem et conventum unanimi nostris assensu pariter et consensu dedisse et hoc presenti scripto nostro indentato concessisse Thomæ Arundell armigero proximam et primam presentationem, donationem, sive nominationem vicariæ parochialis Sancti Antonii in Maneck predict : proxime et immediate post datum presentium quandocunque et qualitercunque vacare contigerit, ita quod bene liceat eidem Thomæ Arundell et assignatis suis personam habilem et idoneam ad vicariam Sancti Antonii predicti quocunque loci diocesano vel de . . .³ ordinario, nomine dicti prioris et conventus presentare quod personam idoneam ad eandem admitti, institui et induci, et hoc pro viginti dierum prox' et immediate post datum presentium. Salvis nobis et successoribus nostris omnibus pensionibus et omnibus proficuis et revencionibus quæ ab antiquo tempore de et in eadem vicariâ annuatim percipere sive recipere consueverimus. In cujus rei testimonium hiis presentibus scripturis sigillum nostrum commune apposuimus. Datum in domo nostrâ capitulari de Tywardraith [sic] 25 die maii anno regni Henrici 8^{vi} vicesimo primo. [A.D. 1529].

The seal of the Laocoon is alone attached at the bottom of the parchment, and in the middle of it.

³ Some omitted parts of this are obscure.

The convent seal will be found attached to the acknowledgment of the royal supremacy by Colyns, 13 August, 1534, and his name is subscribed to it.

2. Licence to a monk of the priory of Tywardreth in Cornwall to visit Rome and its holy places. 5 Feb., 1517.

Pateat omnibus tam ecclesiasticis quam secularibus presentem paginam inspecturis, quod Ego dominus Thomas Colyns, Prior monasterii divi Andreae Tywardreth vulgariter appellati in comitatu Cornubiæ et diocesis Exoniensis liberam dedi facultatem domino Ricardo Wencote sacerdoti et nostræ religionis nuperrime confratri votum religionis necnon professionis susceptum penitus deserendi et relinquendi sub hâc sequenti lege et conditione, quod predictus Ricardus Wencote cum summâ et permagnâ celeritate Roman adiens liberam ubiliter vagandi e Summo Pontifice assequatur veniam, idemque Ricardus suapte sponte pleraque sanctorum monumenta peregre proficiscens, Deo duce, visere decrevit. Quod neminem lateat antedictum Ricardum pacifice progredientem tollere pium esse et meritorium suaque suscepta vota perfecturum, et quoniam (*quod?*) hanc scedulam veram esse liquido intelligetis sigillum officii mei presentibus infixi. Datum apud Tywardreyth (*sic*) quinto die mensis Februarii anno Domini millessimo quingentesimo septimo decimo.

The original on parchment before me has no seal attached; it is, therefore, only a copy or memorandum of the original under seal of office, *i. e.*, office of Prior, and not of the convent.

E. S.

SEPULCHRAL BARROWS AT BROAD DOWN, NEAR HONITON, AND
AN UNIQUE CUP OF BITUMINOUS SHALE THERE FOUND.¹

By the Rev. RICHARD KIRWAN, M.A., Rector of Gittisham,
Hon. Local Secretary of the Devonshire Association.

ON the occasion of the seventh Annual Meeting of the Devonshire Association for the Advancement of Science, Literature, and Art, held at Honiton in July, 1868, under the presidency of Sir John Duke Coleridge, M.P., it had been determined by the Council that an examination should be made of a group of barrows situate at Broad Down, Farway, about four miles distant from the place of meeting. Excavations were accordingly made at three of those barrows, and they were visited by the members of the Association. The following notices relate chiefly to the examination of one of those curious grave-hills, and to a remarkable relic,—a cup, of bituminous shale, so far as I am aware, unique,—disinterred on that occasion.

It is desirable on many accounts to place on record, as extensively as possible, within the range of archæological literature, the leading facts connected with the discovery of the interesting pre-historic relics that were then brought to light; partly because, whilst the disinterment of such remains connected with primitive deposits has been of common occurrence in the adjoining counties of Cornwall, on the one hand, and of Wiltshire and Dorsetshire, on the other, they have hitherto been of very rare occurrence in Devon. I have a further inducement to follow this course by the occasion it affords of giving illustrations of objects thus discovered, for the benefit of those who have not had an opportunity of inspecting the originals. In addition also to their rarity, a further interest gathers around these curious

¹ This Memoir is here reproduced, in somewhat abridged form, from the more detailed Report that has been given in the Transactions of the Devonshire Asso-

ciation, vol. ii. part ii. p. 635, and also in the Transactions of the International Congress of Pre-historic Archæology held at Norwich, p. 381.

sepulchralia, from the fact that they supply a link in the chain of the pre-historic archæology of Devonshire. The two extremes of the series, which have been worked out with much ability, may be stated thus :—The discoveries made at Brixham Cavern, and at Kent's Hole, near Torquay, carry back the existence of man upon the soil of Devonshire to a time cotemporaneous with that of the cave-men of France and Germany. Very different conditions of climate, of coast-line, of relative land and sea-level, then prevailed ; probably the rigour of the glacial epoch still existed, whilst the mammoth, the cave-bear, the tichorhine rhinoceros and other extinct animals, roamed over the district which now forms the shores of Torbay. We start then with this fact, that when man existed upon the continent of Europe in the glacial period (that is to say, at the most remote period of his history yet disclosed), he also existed in Devonshire. Here we have the one extreme of a series, of which the other is limited by the dawn of the historic period. Of this we have numerous examples in Devonshire ; nor need I refer to any other than that of the Roman *Isca* (Exeter), which has yielded abundant evidence of man possessing a knowledge of the metals, and a certain amount of civilization. The intermediate period, however, so far as regards the county, has been but imperfectly worked out, and yet surely it is not from want of materials. The cromlechs, circles, dolmens, meinhirs, upright stones disposed in avenues, and other antiquities of a similar character on Dartmoor, the hill-fortresses of East Devon, and the ancient burial-mounds which are to be found dotting the summits of the higher ground in the neighbourhood of Honiton and Sidmouth, and also in other parts of the county, are so many landmarks of the history, the national customs, the social habits, and, it may be added that they testify to the warlike character of the primeval inhabitants of Devonshire. So abundantly are these venerable remains scattered over the hill-tops that frown down upon the vale of Honiton, that probably no district in England is richer in them. Almost every swelling prominence has its intrenched fortress, and of these some are so extensive that they would have required a small army to defend them against attack on all sides. I may cite as an example Hembury Fort, three miles distant from Honiton : it is of ovate form, measuring about 400 yards in length, and

130 yards in breadth ; within a mile also of Broad Down is Blackbury Castle, measuring from east to west 220 yards, and from north to south 115 yards. The same district also abounds with the sepulchral remains of its early inhabitants. And yet, up to the present time, these vestiges of a people, the very name of whom is lost, have attracted but little attention. Many barrows have been destroyed by the advancing plough of the agriculturist, but in no cases have the cinerary urns and other mortuary remains been preserved.

Leaving the town of Honiton by the Sidmouth road, the ground quickly rises, and attains an elevation of about eight hundred feet above the sea level. At a distance of three miles, at a point where four roads meet, known as Hunter's Lodge, is a large flat stone which, according to tradition, was used as an altar for human sacrifices. A portion of it upon one side appears to have been cut away, and it may originally have formed one of the supporting stones of the cap-stone of a dolmen. Local tradition further states that the stone descends the hill every night, bathes in the stream for the purpose of washing out the stain of human blood which is still upon it, and that before morning it returns to its original position.

If we now take the Seaton road, a branch of the old British and Roman Ikeneld Way, that, passing from Colyford over Farway Hill, through Ottery St. Mary, joins the main road at Fair Mile, we observe, on the left, a mound crowned with trees. Other mounds of a similar character, though smaller in size, occur at intervals ; these are the first evidences of the cemetery of an extensive tribe—the outlyers of the Necropolis that we are now about to enter. As the eye travels over the undulating surface of the ridge that constitutes the boundary of the coombes on either side, it detects here and there the swelling outlines of the tumuli which are the sepulchral vestiges of the early inhabitants of the district. Invariably they crown the summits of the ridge, and command a glorious panorama, presenting the most lovely combinations of scenery. Looking inwards you note the alternations of hill and valley, of wood and water, of heathy upland gradually merging into sunny pasture, and stretching out as far as the eye can reach ; whilst, if you view the prospect sea-wards, it will be found to embrace the

range of the great bay of Dorset and Devon, extending from Portland on the east to Berry Head on the west, and bounded on either side by coast scenery of the finest character. An inspection of the site of these tumuli serves to show that the position selected is not accidental. I have mentioned the fact that they crown the swelling summits of the hill, whilst again they are absent in the gentle hollows that occur between the undulations; and we can scarcely avoid the inference either that the warrior was buried on that spot which was within sight of the scene of his deeds of prowess, in order that his companions or his progeny, as they looked upon the memorial, might be incited to emulate his valor; or else, that the mighty hunter was laid to sleep in that resting-place, from which his friends fondly hoped that his spirit would still look down upon the wooded slopes of the vale beneath, where the wild red-deer had often yielded to his skill in the chase.

In his description of the barrows of Denmark Worsaae observes, of the vestiges of the "Age of Bronze,"² "The barrows of this period were placed, wherever it was possible, on heights which commanded an extensive prospect of the country, and from which in particular the sea could be distinguished. The principal object of this appears to have been to bestow on the mighty dead a tomb so remarkable, that it might constantly recall his memory to those living near; while, probably, the fondness for reposing after death on high and open places may have been founded more deeply in the character of the people." A similar peculiarity appears to have distinguished the primeval burial-places of Scandinavia.³

As we proceed eastwards we reach the summit of Farway Hill, where, at a short distance to the left of the road, there is a circular entrenchment, known as Farway Castle. It is about 200 feet in diameter, and is surrounded by an *agger* of low elevation, with a shallow fosse on the outside. We have here, probably, the remains of the enclosure within which resided the tribe whose *sepulchralia* we are about to examine, and who held this position as a place of refuge in case of any sudden raid. Encircling this castle is a group of

² Worsaae's *Primeval Antiquities of Denmark*, p. 97.

³ Nilsson's *Primitive Inhabitants of*

Scandinavia; translated by Sir John Lubbock, Bart., p. 13.

ten or twelve circular bowl-shaped mounds, rising gradually from the level of the ground towards the centre ; they vary from 40 feet to 80 feet in diameter, and attain a perpendicular height, which ranges from four or five to ten or twelve feet. Some of this group of barrows were partially destroyed when the high road across the hill was made at the commencement of the present century ; and at that time, according to tradition, sepulchral urns were discovered, none of which, however, were preserved. A glance at the surrounding district suffices to show that the advance of agriculture, as it has made its way up the hill-slopes, has promoted the destruction of these grave-mounds. Here and there a field may be observed that has been reclaimed from the moor-land waste, the level surface of which bears no evidence of sepulchral remains ; whilst immediately contiguous to the hedges that bound the field barrows are numerous ; the conclusion seems irresistible that others were destroyed and all traces of them obliterated, when the field was enclosed. Wherever the once verdant surface of the down has disappeared beneath the ravages of the plough, there have barrows been levelled, and the vestiges of the ancient inhabitants ruthlessly destroyed.

Continuing our journey in the same direction, we arrived at that part of the hill known as Broad Down, where, by the permission of Sir Edmund S. Prideaux, Bart., it was resolved that excavations should be made, as before stated, on the occasion of the meeting of the Devonshire Association at the adjacent town of Honiton.

The first of the barrows then examined was situated in a field to the east of the high road, overlooking the beautiful vale known as Roncombe Gurt ; it measured eight feet in height, and ninety-four feet in diameter ; around it there appeared to be traces of a shallow ditch. The action of the plough had gradually worn down the surface of this barrow, so that its height had been reduced by some two or three feet, and the fosse had become well nigh obliterated, although the mound retained its circular form and symmetrical curvature. Since the excavations were made, I have observed that the remains of a circle of large boulders may still be traced around a neighbouring barrow ; these stones are firmly bedded in the tough peaty soil, and are partially overgrown with heather and furze. They resemble in cha-

racter the stones that are still to be met with in the neighbourhood, though probably collected from different places, there being grey weathered smooth stones from the surface of the moor, and which had once been exposed to the eroding influence of the atmosphere; whilst again there are angular masses of flint or chert which had been quarried in the neighbouring hill-sides. It appears probable that at least all the larger members of this group of grave-mounds were once protected by a circle of boulders placed at regular intervals around the base of each of them, a peculiarity that assimilates them to some tumuli in Northumberland that have been lately explored.⁴ In most cases these stones have long since been carried away for building purposes, or to be broken up for the repair of the roads.

Operations were commenced by cutting a trench four feet wide through the centre, from south-east to north-west. The mound proved to be formed of alternate layers of peat and of a blue clay, which the workmen said did not belong to the locality. It appeared never to have been disturbed. No indications of a deposit became apparent until the natural surface was reached at the centre of the barrow; a layer of charcoal, apparently the burnt remains of brushwood, such as the surrounding furze and heather would supply, yielded the first intimation of an approaching "find." Interspersed with the charcoal were nodules of ruddle;⁵ beneath it was a thin ferruginous seam, perfectly solid, and hard like stone, which possibly might be the result of heat. In this, and in two tumuli subsequently examined, iron ore occurred abundantly, either in the form of a thin band, or in the shape of nodules of pyrites.⁶ The latter mineral is of common occurrence on the surface of the hill, but it is present in these barrows in such abundance as to suggest the probability of its having been placed there designedly.⁶ Possibly a nodule of this material was then, as now, regarded as a "thunderbolt," and

⁴ See an article entitled Descriptions of Cairns, Cromlechs, Kistvaens, and other Celtic Monuments. By Captain Meadows Taylor. Transactions of the Royal Irish Academy, vol. xxiv.

⁵ Red ochre or red hæmatite. A stratum of this ore occurs at Peak Hill, near Sidmouth, about six miles distant from Broad Down. Mr. Bateman suggests, in Ten Years' Diggings, p. 179, that ruddle was probably used as a war-paint by the

ancient Britons. He mentions the occurrence of a nodule in a barrow at Eastern, "which, from its abraded appearance, must have been in much request for coloring the skin of its owner."

⁶ In a list of the Vestiges of the Antiquities of Derbyshire, tabulated by Sir John Lubbock in his work on Prehistoric Times, several instances are mentioned in which nodules of iron pyrites were found in barrows.

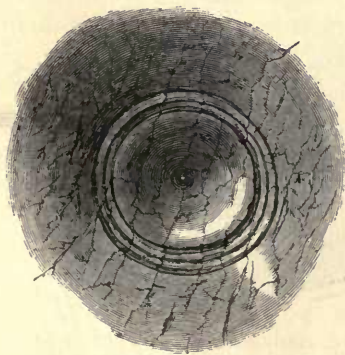
belonged to the class of objects that was supposed to have a talismanic virtue. Beneath the bed of charcoal was a layer of flints, placed, with some regard to order, side by side, so as to form a kind of pavement 13 feet by 9 feet.⁷ The interstices were filled up with blue clay, which in some instances had become baked by the action of the fire when the funeral pyre was kindled; from the same cause the surface of the stones, when not protected by the clay, had been partially vitrified. Beneath this layer of stones was the natural surface of the ground, which appeared to have been pared down to the depth of a few inches, as if to afford an even surface. The general features in connection with this barrow will be best understood by reference to the accompanying diagram. (See Section, No. 1.) Increased care was now used as we proceeded with the investigation; the excavations were carried on until we reached the original surface, exactly below the centre of the mound, where we discovered the interment. It consisted of a deposit of calcined bones resting upon the charcoal, which spread out from the bones for some distance, and covered the layer of flints which formed the funeral hearth.

Immediately contiguous to this deposit, raised slightly above it, and a few inches to the east, a very remarkable cup was brought to light. Fortunately it was removed in a state of complete preservation, with the exception only of a slight indentation on the rim, which the workman made with his pick-axe. On the removal of this cup it was taken to a neighbouring cottage, and, as it began to crack and warp by exposure to the atmosphere, it was immersed in water. This very rare and curious relic, which is here figured, measures $3\frac{1}{2}$ inches in height, its greatest diameter, which is at the mouth, being 3 inches; its capacity is about a gill. The form of the bowl is ovate or bell-shaped, tapering from the rim, and terminating in a cone; originally the periphery was circular, but it has become in a slight degree distorted by the pressure of the earth beneath which it lay. The ornamentation consists of four series of hoop-like rings that encircle the bowl in a plane parallel to the rim; of these the first hoop, consisting of three rings, occurs immediately

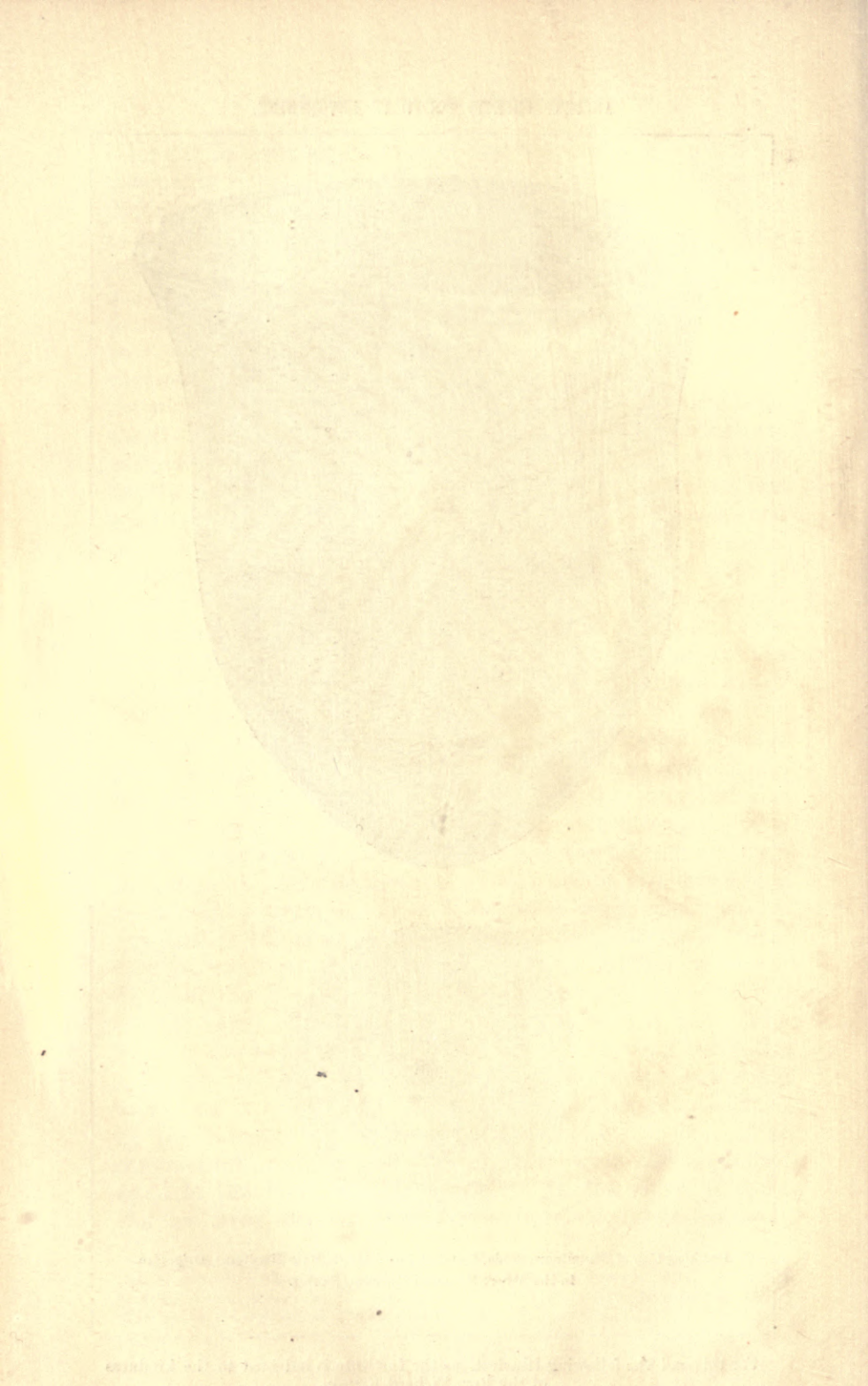
⁷ A barrow opened at Tenby, and described as paved with stones, is mentioned in *Arch. Journ.*, vol. x. p. 76. See also Warne's *Celtic Tumuli of Dorset*, p. 41,

wherein the author, in describing the excavation of a barrow, says, "A portion of the base of this mound was rudely paved."

ANCIENT OBJECTS FOUND IN DEVONSHIRE.



Drinking Cup of Bituminous Shale, found at Broad Down, near Honiton. Orig. size.
In the Albert Memorial Museum, Exeter.



ANCIENT OBJECTS FOUND IN DEVONSHIRE.



"Incense Cup," found in a Barrow at Broad Down, near Honiton, 1868.
Albert Memorial Museum, Exeter (original size).

beneath the lip; a second, consisting of four rings, is found round the centre of the bowl, which thereby is divided into an upper and lower section; a third, consisting of three incised lines, is situate at about the centre of the lower portion of the bowl, whilst at the apex of the cone is a terminal ornament of three concentric circles. The border of the cup is ornamented along its interior margin by a pattern of two parallel chevrony zigzags, that run beneath a single horizontal incised line. The handle, which is of one piece with the bowl, is too small to admit of the insertion of a finger, and was probably intended to be used for a string-hole, as a means of suspending the cup from the shoulder or waist of its owner. It measures $1\frac{3}{4}$ inches in length, with a mean breadth of $\frac{3}{4}$ inch, and is about $\frac{1}{4}$ inch in thickness; its ornamentation consists of two upright bands, each of which is formed of two parallel lines that are continued along either edge upon its exterior surface. (See woodcut, fig. 1.)

A very curious and interesting question arises as to whether this cup is hand-made or lathe-made.⁸ The difficulty of forming such a vessel on the lathe, so as to leave the projecting handle, which, it will be remembered, is of one piece with the bowl, would at first sight appear to be almost insurmountable, and would suggest that the cup is hand-made. And yet, upon a close examination of the bowl of the cup, the incised lines that form its ornamentation occur with such regularity as almost to preclude the possibility of their having been carved by hand; moreover, marks which a rotating tool would produce may be distinctly traced within the interior of the vessel. This latter opinion is confirmed by that of a skilful practical turner, to whom I took an opportunity of submitting the cup. He expressed himself satisfied that it had been made on a "pole-lathe," and added that there would be no difficulty in turning the upper part so as to leave a projection, which would admit of being afterwards fashioned by the chisel and cut through to form a handle.⁹

⁸ In Wilde's Catalogue of the Museum of the Royal Irish Academy, pp. 217 *et seq.*, there occurs a description of ancient wooden methers or drinking-cups; they are mentioned as of a single piece, most of them are turned on a pole lathe, and of various sizes, from those capable of holding about a quart, to others not larger than a wine-glass. In regard to ancient vessels of wood may be cited some oak

bowls found, as stated by the late Rev. E. A. Bray, Vicar of Tavistock, in a bog between the Ashburton and Moreton roads. The fashion and dimensions of these ancient vessels are not given. The Tamar and the Tavy, by Mrs. Bray, vol. i. p. 136. An oak of large size, also alders and willows found in the bogs on Dartmoor, are there noticed.

⁹ The history of the lathe in prehistoric

Shortly after the discovery above related, a visit to the barrow was made by the members of the Devonshire Association, on the morning of 31st of July. Naturally, the cup was an object of great interest, and speculation was rife as to the material of which it was composed. At first it was thought to be made of pottery; when it had become dry, however, by exposure to the atmosphere, it presented the appearance of fossil wood or of bog-oak. A few days after its disinterment, I availed myself of an opportunity that occurred of sending the cup to London with a view to obtaining from the authorities at the British Museum an opinion as to its material. It was shown at a meeting of the Society of Antiquaries, and was submitted to the inspection of Dr. Birch and of Mr. Franks, by both of whom it was considered to be formed of Kimmeridge shale. Subsequently it was exhibited at the International Congress of pre-historic Archæology at Norwich, by the members of which it was pronounced to be quite unique of its kind, although doubts were expressed as to the material of which it was made.¹ Afterwards it was submitted to Professor Tennant, and also to Mr. Etheridge, one of the curators of the Museum of Practical Geology in Jermyn Street, and by both an opinion was expressed to the effect that it was formed from a lump of Bovey Tracey lignite. Under these circumstances, I referred the question to Mr. W. Pengelly, F.R.S., of Torquay, who has devoted much attention to the beds of Bovey lignite, and who contributed a monograph thereon to the Transactions of the Royal Society. His reply to me was as follows:—"I was present when the Broad Down tumuli were opened in July last, and saw the vase in question very soon after it was found. I confess that I am very sceptical about its being formed of Bovey lignite; and this, partly because of my recollection of the vase, and partly on account of the provoking tendency of the lignite to crack and break into pieces on exposure to the air. This, however, I hope to test very soon, by getting a vessel turned of lignite, if possible." The opinion thus expressed by Mr. Pengelly is confirmed by that of Mr. John Divett, proprietor of the Bovey lignite beds, as follows:—"With regard to the little

times is an interesting subject for research.

¹ A full account of the discovery has

been given in the Transactions of the Congress, in which the cup is likewise figured, p. 371.

vase that you mention, I do not for a moment believe that it was turned from Bovey coal. That the Bovey coal is *torno rasile* I doubt not; but I know not the conditions under which a vessel turned out of Bovey coal could hold together for many years. I have seen a piece, well varnished, remain in shape for some time, but even that protection does not last long."

As regards, however, the disputed identification of the material of which the cup is formed, and which has been regarded by some authorities as fossilized wood, such as has occurred in turbaries, or in strata at a considerable depth, for instance at Taunton,² it may be stated that I have been favored with the opinion of Mr. Carruthers, of the British Museum, a gentleman most competent probably of any of our savans in this country to decide the vexed question. After minute and most careful examination with the microscope, Mr. Carruthers pronounces without hesitation that the material is a bituminous shale, in which no trace whatever could be recognised of woody structure.

It may not seem irrelevant to the subject under consideration to notice the singular little cup, described as of oak, found in 1767 in the King Barrow, Stowborough, near Wareham, Dorset. The interment was in this instance in a large hollow trunk of an oak: several human bones, unburnt, lay in this depository, wrapped in deer-skin. No weapon, or traces of metal, were found, with the exception of a small portion (as stated) of gold lace. The cup measured about 2 in. in depth; the mouth was elliptical in form, the major axis measuring 3 in., and the minor 2 in.; it was ovate or bowl-shaped, and had probably been placed at the head of the corpse; the exterior surface was engraved with horizontal and oblique lines. Although described by Mr. Hutchins as formed of oak, it is more probable, as suggested by Dr. Wake Smart, that it may have been of the Kimmeridge shale of the district.³ Worsaae describes an interment very similar in character, that occurred in a barrow in Denmark:⁴ the

² Trans. Somerset Arch. Soc., 1864.

³ This cup is figured in Hutchins's Hist. Dorset, vol. i. p. 26, first edition, 1774; Camden's Britannia, vol. i. pl. 11, p. 76, edit. Gough. See also the account by Mr. Hutchins, Gent. Mag., vol. xxxvii. p. 53; Waerne's Celtic Tumuli of Dorset:

Tumuli opened at various periods, p. 4. This remarkable relic came into the possession of Gough; it is not known whether it still exists.

⁴ Worsaae's Primeval Antiquities of Denmark, p. 96.

corpse had been laid in the thick stem of an oak, about 10 ft. in length, and split in two; remains of garments were found, a lock of brown human hair, a bronze dagger, palstave, &c., and "a small round wooden vessel, with two handles at the sides, in which was found something which had the appearance of ashes." A similar interment of the Bronze Age has been described by him in this Journal, in a barrow in South Jutland. It was accompanied by a one-handled wooden cup, decorated with studs of tin; the bottom of the vessel tapers to a very narrow base.⁵

In a memoir entitled "The Kimmeridge Coal-money," contributed to the Purbeck Society in 1857, by the Rev. John H. Austen, there occurs a description of vessels composed of Kimmeridge coal or shale that have been already discovered.⁶ Mr. Austen gives an extract from a communication made by the late Professor Henslow to the Cambridge Antiquarian Society in 1846, on the materials of two sepulchral vessels found at Warden, in Bedfordshire.⁷ The Professor says, "Upon looking over some fragments of Romano-British pottery from the neighbourhood of Colchester, I met what appears to have been part of a large *patera*, or at least some vessel with a flat surface and a shallow projecting rim. This fragment is of the same material as the Kimmeridge 'Coal-money;' and bears the impression of a fossil ammonite (?) distinctly marked upon its surface. Upon drying, it has become cracked and warped, precisely in the same manner as we see specimens of the 'Coal-money.'" The same author describes also the two vessels which were found at Warden, in Bedfordshire, now in the possession of the Cambridge Antiquarian Society, and which, he says, are "composed of a bituminous shale, in all respects similar to that which occurs in the Kimmeridge clay, and from which the coal-money has been turned."

An account of the discovery, by the late Lord Braybrooke, of two other vessels of Kimmeridge coal, was given in this Journal by Mr. Albert Way, F.S.A.: "In December, 1856, two remarkable *canistra*, vessels formed of Kimmeridge coal or shale, were discovered in proximity to Roman remains at Great Chesterford, Essex, and are now preserved in the

⁵ Arch. Journ., vol. xxiii. p. 32.

⁶ Papers read before the Purbeck Society, by the Rev. John H. Austen, pp. 82-97, and pp. 221-238.

⁷ Transactions of the Cambridge Antiquarian Soc., 1846, where one of the vessels is figured. The second (imperfect) is in the British Museum.

Museum at Audley End. The vessels are so perfect, and the condition of the materials so compact, that they were for some time concluded to be of wood. By exposure to the air the coal has cracked and exfoliated, precisely as the 'Coal-money' usually does. No doubt can exist of the identity of the material. The vessels have been carefully compared, by many persons who have seen them, with the specimens of 'Coal-money,' for which we are indebted to Mr. Austen. The material is precisely the same. These vessels of shale are remarkable as having been turned out of blocks of very large dimensions, whereas the vases before mentioned found at Warden were formed of several pieces rabbeted together."⁸

Mr. Way also informed me that in the Museum at Boulogne is a covered box of about $4\frac{1}{2}$ in. in diameter, which he believes to be of Kimmeridge coal, from the apparent identity of material with that of the vessels found at Warden and at Great Chesterford.

I am enabled to supplement this list of vessels formed of Kimmeridge shale by other examples, that may afford the means of suggestive comparison with the cup under consideration. In draining a withy-bed at Rempston, near Corfe Castle, in 1845, the workmen came upon a deposit of Kimmeridge "coal-money," that occurred beneath a bed of peat; there was also a vessel, described as "like the bowl of a large glass or rummer, and with the bottom or stand broken off." Here we have an instance of a cup somewhat similar to that found at Broad Down, indubitably of Kimmeridge shale. Now as the "coal-money" with which this cup was associated is an undeniable proof of turning craft,⁹ it is reasonable to suppose that the cup here alluded to was an imperfect or damaged object, thrown aside with the refuse of the lathe. The remark that "the stand was broken off" may probably refer to the portion of the shale that pivoted on the lathe, and which would have been turned off or cleared away smooth, had the vessel not been rejected as a failure before its completion. In explanation of the use

⁸ Arch. Journal, vol. xiv. p. 87.

⁹ Kimmeridge coal-money is now known to be the central part that was turned out of rings, amulets, *armille*, and other circular ornaments that were lathe-made. It was thrown away as refuse. See the

late Mr. Sydenham's Memoir read at the congress of the Archæological Association at Canterbury, 1844, Arch. Journal, vol. i. p. 347, and the valuable summary of notices by the Rev. J. H. Austen, Purbeck Papers, p. 92.

of this material in the manufacture of cups, *pateræ*, and personal ornaments, for which it appears to present no peculiar advantages, it may be suggested that possibly a superstitious value attached to it. This opinion is based on the fact that amulets of Kimmeridge coal, *armillæ*, beads, and other such ornaments, have been frequently found in barrows.¹ A large slab of this material has occasionally occurred as the covering of an interment in a tumulus. Mr. Austen has also quoted the authority of Pliny, who mentions that the *gagates* of Britain, a mineral to which the lignites and shales of the Dorsetshire coast and of Devon bear a certain resemblance, possesses, amongst other medicinal or magic virtues, that of driving away serpents.²

In noticing other objects which appear to present features of analogy with the drinking-cup found at Broad Down, and that by comparison may assist us in arriving at a knowledge of the relative date to which it should be referred, I may here allude to the remarkable discovery of a cup of gold, in possession of the Queen, that was disinterred from a barrow at Rillaton, near the "Cheese-wring" in Cornwall, in the year 1837, as related in this Journal by Mr. Edward Smirke.³ A bronze celt, of simple form, was found with it, and an urn or vessel of fictile ware, that does not appear to have been preserved. The deposit had been made in a cist formed of flat slabs of stone. This highly curious gold cup—so far as I am aware, unique—measures in height $3\frac{1}{4}$ in. ; the diameter at the mouth is $3\frac{3}{8}$ in. ; at the widest part of the bowl $3\frac{1}{2}$ in. The handle measures $1\frac{1}{2}$ in. by $\frac{7}{8}$ in., greatest width. The weight of the cup is 2 oz. 10 dwts. ; its bullion value is about £10. The handle, which has been a little crushed, is attached by six rivets. This appendage, it should be observed, seems, at least in its present state, fit only for means of suspension, barely affording sufficient space for the smallest finger to be passed through it, a peculiarity presented likewise in the cup of shale before described. On the bottom of the cup there are concentric rings or corruga-

¹ Some of these ornaments are figured in Sir R. C. Hoare's *Antient Wilts*, vol. i. plate 34. See also *Transactions of the Archaeological Association*, 1845, in which occurs a description of two ornaments of Kimmeridge coal found in a barrow on Alsop Moor, and which, the author sug-

gests, "were attached to the dagger as charms."

² Pliny, *Nat. Hist.*, lib. xxxvi. cap. 19.

³ *Arch. Journ.*, vol. xxiv. p. 189. *Journal Roy. Instit. of Cornwall*, No. ix. 1868.

tions like those on the rest of its surface, as shown in the wood-cut accompanying the interesting memoir by Mr. Smirke.

Many points of resemblance between this cup and that brought to light on Broad Down will be readily observed ; as, for instance, the dimensions, and also the general outline, which in both cases is ovate or conical ; the rounded base, and the character of the ornamentation ; these, and other peculiarities, are indicative of a certain general resemblance between the two objects before us.

In searching for other examples of cups or vessels which are not dissimilar in character, we must not fail to notice the amber cup that was found in a barrow at Hove, near Brighton, in the year 1856, and figured in this Journal. The discovery is thus described by Mr. Barclay Phillips :⁴—"On reaching the centre of the tumulus, about 6 ft. east of the road to Hove Station, and about 9 ft. below the surface, in stiff clay, the labourers struck upon a rude wooden coffin, 6 or 7 ft. in length, deposited east and west, and formed with boards apparently rudely shaped with the axe. The wood soon crumbled to dust ; a knot, however, or gnarled knob was preserved, and ascertained to be of oak. In the earth with which the coffin was filled many fragments of bone were found, seemingly charred. About the centre, the following objects were discovered:—(1.) A cup, or bowl, supposed to be of amber, with one small handle near the rim, sufficiently large to pass a finger through it. A band of five lines runs round near the rim, interrupted by the handle. The height of the cup is $2\frac{1}{2}$ in., diameter $3\frac{1}{2}$ in., average thickness $\frac{1}{8}$ in. The interior surface is smooth, and the appearance would indicate that the cup had been formed on a lathe, which, however, seems scarcely possible when the position of the handle is considered. The cup would hold rather more than half a pint. (2.) A stone axe perforated for the haft. It is of an unusual type, and is wrought with much skill ; the length of it is 5 in. (3.) A small hone (?) of stone, measuring $2\frac{7}{10}$ in. in length, perforated at one end. (4.) A bronze blade, of a type which has frequently occurred in Wiltshire, and in other parts of England. The labourers state that the coffin rested on the natural soil—stiff yellow clay, whilst the barrow seemed to have been formed of the surface mould of

⁴ Arch. Journ., vol. xiii. p. 183.

the locality and rubbish heaped together, with considerable quantities of charred wood.”⁵

In this amber cup, and also in its handle, it will be seen at once that we have again a certain constructive resemblance with the treasure-trove of Broad Down. The rounded base, the ovate form, the smallness of the handle, and the character of ornamentation, all combine in pointing to a general approximation of type.

Among other relics that claim notice in connection with the subject before us, two small urns, of a shape that has been regarded as peculiarly Irish, deserve attention, as presenting certain features of analogy with the peculiar cup found at Broad Down, and also with other vessels that have been mentioned. These Irish *ficilia* are formed with a pointed base, so that, like the antique *rhytium*, or the fox's head drinking-cup of modern times, they could not stand erect. A similar fashion appears in some drinking vessels of glass of the Anglo-Saxon period. Of one of the little Irish vessels to which allusion has been made, a representation will be found in this Journal.⁶ It was found near Castlecomer, co. Kilkenny, in quarrying stones; it had been deposited in a small circular cist formed of stones, resting upon a slab about 2 ft. square; another slab covered the top. Within this cist there was an earthen cylinder, described as without a bottom; that part may possibly have perished, or have been broken away. This urn was rudely scored with a chevrony pattern, and within it had been placed the small vessel that rested on its mouth. It is of hard grey or ash-colored ware, and even in its present broken state shows considerable elegance in form. The lip is unusually broad, and projects so as to render the little vase apparently ill suited for the purpose of a drinking-cup. There is no handle. The lower part, ribbed like a melon, tapers to a point at its base. Around it, and within the cylinder, there were many calcined fragments of bones, of which also a quantity was found outside the cist. The Rev. James Graves, Secretary of the Kilkenny Archæological Society, by whom this discovery was made known to the Institute, observed that this specimen bears close resem-

⁵ The whole of these remarkable relics have been presented by Baron Goldsmid to the Brighton Museum. It is much to be regretted that a group of objects so unique in character should not be perma-

nently preserved in the British Museum.

⁶ Arch. Journ., vol. viii. p. 200. See also Journ. Kilkenny Arch. Soc., vol. i. p. 136.

blance in size and shape to that found near Bagnalstown, county of Carlow, a figure of which was published by the Royal Irish Academy.⁷ This object is now in their Museum. Mr. Graves remarked that the small funereal vases of this type seem intended to have been placed inverted, perhaps over the ashes of the heart, and within larger vessels containing the other relics of the body. The fragments of the large urn are of red imperfectly baked ware; the bones enclosed within it comprised fragments of bones of an adult that had been exposed to cremation. This little urn may have measured in its perfect state about 3 in. in height. The vessel referred to by Mr. Graves as having been discovered at Bagnalstown has been figured in a previous volume of this Journal.⁸ It is thus described by Sir W. R. Wilde:—"When reversed, the bowl" (which is rounded at the base) "presents, both in shape and ornamentation, all the characteristics of the Echinus, so strongly marked, that one is led to believe the artist took the shell of that animal for his model. It possesses the rare addition of a handle,⁹ which has been tooled over like the rest of the vessel. This beautiful little urn stands but $2\frac{1}{8}$ in. in height, and is $3\frac{3}{4}$ in. across the outer margin of the lip, which is the widest portion. Its decoration consists of nine sets of upright marks, each containing three cross-barred elevations, narrowing towards the base, which is slightly hollowed; the intervals between these are filled with more elaborately-worked and minute impressions, each alternate space being further ornamented by a different pattern. A rope-like ornament, surmounted by an accurately-cut chevron, surrounds the neck. The lip, which is nearly flat, is one of the most beautifully ornamented portions of the whole; a number of small curved spaces, such as might be made by the point of the nail of the forefinger, surround the outer edge, and also form a similar decoration on the inner margin; upon the flat space between these, somewhat more than $\frac{1}{2}$ in. broad, radiate a number of very delicately-cut lines."¹ This beautiful little urn was found in a railway cutting, in a small stone chamber; it contained portions of the bones of a very young child, and was imbedded in a much larger and ruder urn, filled with

⁷ Proceedings, vol. iv. p. 36; vol. v. p. 131.

⁸ Arch. Journ., vol. xiv. p. 393.

⁹ This is small and agrees in typical

character with that of the cups already described.

¹ Catalogue of the Museum of Antiquities of the Royal Irish Academy, p. 179.

fragments of adult human bones ; possibly, as Sir W. Wilde remarks, they may have been the remains of a mother and child. Mr. Graves subsequently sent notices of some very curious "food vessels" from a lake-dwelling in Lough Erne, near Enniskillen. They are of ill-baked black ware, diameter 4 to 10 inches, and some examples have a very diminutive ear or handle near the rim, suited only for suspension by a cord.

Such are the particulars that I have been enabled to collect concerning cups or vessels associated with ancient interments, and which afford materials for useful comparison with the specimen from Broad Down. At the conclusion of the memoir I will briefly summarise these facts, and point out the inferences as to the relative age of the barrow and its contents which these notices tend to establish.

It is worthy of remark that the tumulus from which this cup was taken was entirely barren of any further results. Subsequently we extended laterally the trench that had been originally cut through the barrow, and also carried out a careful examination for a considerable distance around the centre, but without finding another deposit. Not a vestige of pottery, no flint flake, worked flint, or weapon of any kind was discovered, which could afford a further clue to the people by whom this tumulus was raised, or to the relative age in which they lived.

We next proceeded to examine a barrow, which lay about 100 yards to the south-west of that which we have just described. It was about 90 ft. in diameter, had been originally surrounded by a shallow fosse, and was 8 ft. in perpendicular height at the apex of the mound. (See sections, No. 2.) Owing to the land being under cultivation, the height of this tumulus was much reduced.

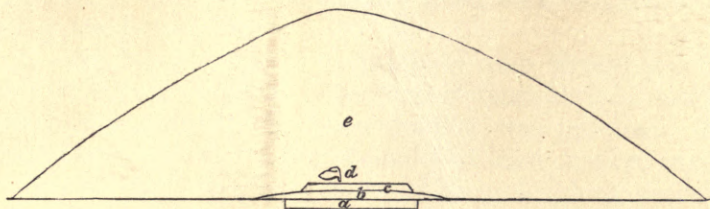
I have given elsewhere detailed accounts of the results of this and of subsequent excavations on Broad Down.² In the barrow first explored we found abundant signs of burning, and a layer of flat stones overlying the burnt materials of the mound, but no trace of the deposit. The search had almost reached conclusion when one of the visitors noticed amongst the *débris* thrown out by the workmen a very per-

² Transactions of the Devonshire Association, vol. ii. part ii., p. 635 ; Transactions of the Third Session of the Inter-

national Congress of Prehistoric Archaeology ; Norwich, 1868 ; p. 381.

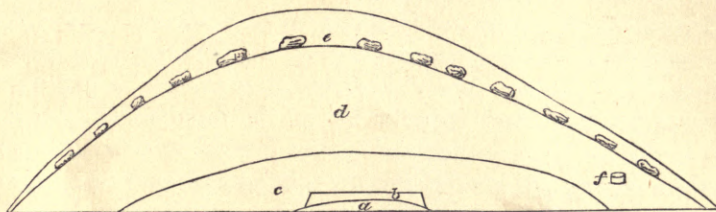
SEPULCHRAL BARROWS AT BROAD DOWN, DEVON.

No. 1.



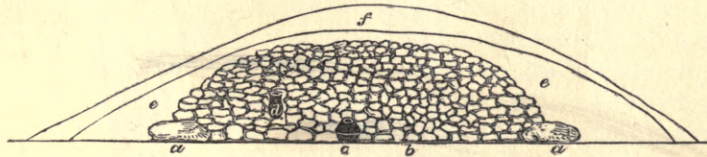
a. Pavement of flints. *b.* Deposit of charcoal. *c.* Layer of calcined bones.
d. Cup of bituminous shale. *e.* Mound of clay and earth irregularly stratified.

No. 2.



a. Deposit of charcoal. *b.* Layer of calcined bones. *c.* Layer of clay and earth.
d. Burnt earth and charcoal. *e.* Layer of stones capping the mound.
f. Probable position of incense cup.

No. 3.



a. a. Circle of large boulders. *b.* Cairn of flints. *c.* Urn. *d.* Drinking cup.
e. Burnt earth and charcoal. *f.* Covering of surface earth.

SECTIONS THROUGH THE THREE BARROWS.

fect and beautiful example of the so-called "incense cup;" it has two small perforations on one side, and the bottom is scored with ornament arranged in the peculiar cruciform fashion noticed upon certain other little vessels of this description.³ This cup was entirely filled with calcined bones, as supposed of an infant.

A third barrow, one of a group of nine situate at a distance of about 200 yards to the east of those already noticed, was then examined. The construction was peculiar. The spot to be occupied by the mound had been marked out by a circle of large boulders, some of them weighing probably half a ton, and placed about 3 ft. apart. Within this enclosure the interments had been deposited, and a mass of stones loosely piled over them, the whole being covered with burnt earth, about a foot in depth, finally capped with surface earth. At the centre there lay an urn in fragments covering a deposit of burnt bones, and surrounded by charcoal. On the east side of the barrow, about 18 ft. from the centre, was brought to light a second deposit, accompanied by an urn of the class designated "food-vessels;" it is ornamented with a band of incised vertical markings around the rim, and parallel lines forming horizontal rings or bands encircling the vessel at regular intervals over the entire surface, like a series of hoops. (See a section of this barrow, No. 3.)

Such, then, are the particulars of the exploration of the barrows at Broad Down that have come under my observation, the narration of which I have endeavoured to compress within the narrowest limits that a faithful description would admit of. One or two questions arising out of the facts that were then observed naturally suggested themselves, and to these I propose now to endeavour to furnish a reply. Where, however, opinion amounts to little more than conjecture, based as it is upon negative evidence in part, or upon facts that are obscure and of doubtful interpretation, I shall express that opinion with diffidence and reluctance.

The question of primary importance is this:—To what people, and to what period, are these barrows in Devon to be ascribed? This is a question, the solution of which is attended with difficulty. In seeking to furnish a reply to it, there are several points which require consideration. The

³ It has been figured, *ibid.*, as are also the urns in the barrow No. 3, next described.

first of these which may be mentioned is the mode of interment. We find at Broad Down remains bearing the marks of unquestionable antiquity, and which have certainly been exposed to cremation. Now barrow-burial, with its accompaniments, appears always to have held a prominent position amongst the funeral rites of a pagan people ; but as soon as that people embraced Christianity, their long-established customs, repugnant rather to Christian sentiment than to Christian doctrine, did not long survive their conversion ; the old methods of interment were gradually modified, and cremation yielded to inhumation. If the correctness of this inference be allowed, we shall at once be able to refer these remains to a period antecedent to the first introduction of Christianity into this island in the second or third century under the Romans. This inference is confirmed by a comparison of the mode of burial with which we are here familiarised with that in common use among the Saxons. Occasionally indeed cremation appears to have been practised by that people ; but by far the more usual custom among them was to dig a grave or cist in the ground, to the depth of several feet, and to raise a mound of low altitude over it. The Saxon graves, too, instead of being comparatively barren of relics, as are the tumuli of Broad Down, abound with traces of human art ; they form, in fact, an archæological mine, from which are dug out weapons and personal ornaments of all kinds, including articles of leather elaborately ornamented with silver or enamel, helmets, spears, shields, swords, daggers, and other weapons ; beads of amber, glass, and porcelain ; whilst brooches, rings, earrings, and bracelets of gold, silver, and copper, form but a small portion of the catalogue.⁴ Once more, the entire absence of coins, pottery, or weapons that bear the impress of Roman art, such as are constantly found in Roman tombs, tends so far to prove that these tumuli were not raised by that people, who, indeed, seldom commemorated their dead by so ambitious a memorial as the barrow.

On the other hand, the antiquities associated with the tumuli that have been described agree in all respects with the characteristics presented by the remains found in other barrows that have been explored in different parts of the

⁴ See an article entitled, "The Saxon Ll. Jewitt, F.S.A., *Intellect. Observer*, Grave-mounds and their contents," by vol. xii. p. 459.

kingdom, and which are generally accepted as of Keltic origin.

The shape and size of the mounds, the mode of their formation, the cremation of the interments, the form, the quality, and the style of ornamentation of the accompanying pottery, all point to the conclusion that these barrows are the sepulchral remains of a people that inhabited the spot many ages before the time of the Roman invasion. One more link in the chain of evidence is supplied by a comparison of the drinking-cup found in the barrow first excavated with the gold cup at Rillaton and the amber cup disinterred near Brighton. The general style and character of these three cups, their similarity in regard to form and size, the ovate form of the bowl which is shared in some degree by them all, the smallness of the handle intended rather for suspension than the insertion of the finger, the ornamental parallel lines that encircle the bowl, and the perpendicular lines that edge the handle in each case of these rare and interesting relics,—all these peculiarities imply a certain constructive analogy, and point to the conclusion that they belonged to members of one and the same people, or of tribes that were cotemporaneous, and who lived under much the same conditions. Now we know that the Cornish treasure-trove, as well as the Brighton treasure-trove, were associated in the burial-place with weapons of bronze; so that in the case of these two relics we cannot err if we attribute them to the "Bronze Age." Moreover, the absence of pottery along with the burial with which the Broad Down cup was found, also leads us to assign that relic to a remote period;⁵ whilst, upon the other hand, the absence of bronze in that tumulus by no means implies that this metal was unknown when the interment took place. Bronze articles with burials are extremely rare.⁶ For a long period after its introduction, this metal appears to have been employed only for more important articles. Being of necessity expensive, and imported from abroad, as we learn from Cæsar, the poorer classes would continue for a long series of years to employ stone as

⁵ I may here cite the authority of Sir R. C. Hoare, who says that "simple cremation was probably the primitive custom. The funeral urn in which the ashes of the dead were secured was the refinement of a later age."

⁶ "Articles such as swords, spear-heads and celts, which were of bronze, appear only on the rarest occasions to have been interred with their owners." Canon Greenwell in *Arch. Journ.*, vol. xxii. p. 256.

their material in the constructive arts ; and probably the rich, in addition to their bronze implements, frequently used others of stone, and especially in cases that would have consumed a large quantity of material in their fabrication. Thus the absence of bronze, in the case of the tumuli under consideration, may be accounted for, both by its liability to decay, and also by the fact of its intrinsic worth, which would render it too valuable to be constantly hid away in a grave-mound. However, we have evidence that bronze has been found associated with burials in barrows belonging to this group, and in immediate proximity to those lately examined. About a hundred years ago a "stone barrow," the mode of construction of which appears to have been identical with that above described, was destroyed, and at the same time a collection of "bronze spear-heads, amounting to half a wheel-barrow full, was discovered."⁷ By far the larger portion of these were carried into the neighbouring town of Honiton, and were there sold as old metal. At present one only is known to be in existence ; it is in the possession of Doctor Snook, of Colyton. It is of a common type, known as the palstave.⁸

I am indebted to a friend for the following extract from the diary of the late Matthew Lee, Esq. :—"July, 1763. The labourers on Lovelhayne Farm, Colyton, near Southleigh, destroyed a stone-barrow in order to procure a supply of stones for the new turnpike road. Upon one side of the barrow they found about a hundred Roman chisels for cutting stones, of a metal between a copper and brass colour, rough, and unhardened." It is possible that, as has often occurred, there were spear-heads mixed with the objects familiarly called "celts," or "chisels." These latter bronze relics are quite distinct from "spear-heads." They are properly to be described as "palstaves," of the type without any side-loops. It is by no means improbable that this was one of those remarkable hoards or deposits buried by some itinerant manufacturer of bronze weapons and implements. The single specimen preserved agrees well with the description given in Mr. Lee's diary, being a somewhat defective

⁷ Davidson's *Antiquities of Devon*, p. 73.

⁸ This, and another relic of bronze, obtained at Honiton, and possibly part of the great hoard in the barrow at Love-

hayne, are figured in the memoir before cited, *Trans. Devon Association*, vol. ii. Congress, *Prehist. Archaeology at Norwich*, p. 381.

and unfinished piece. The rough seams at the side, left by the divisions of the mould, have not been trimmed off.

Here then we have evidence which will enable us to arrive at an approximate date for the barrows that exist on Broad Down. Upon a survey of these facts, I see no difficulty in assigning a high antiquity to the relics that have been lately brought to light, or in considering them as the remains of a people who flourished long before the advent of any historic race. Taking all the circumstances into consideration, we must assign them to a period antecedent to the Roman invasion of Britain, and probably we shall not err if we refer them to a period far more remote, when bronze, whilst known, was scarce, and when its use was confined to the more powerful part of the population.

I have ventured to put forth these conjectures, at the same time that I have stated the reasons on which they are based, because it would appear as if some degree of theorizing is required in order to reconcile and explain isolated facts; and, whilst I do not claim universal acceptance for the conclusions at which I have thus arrived, they will be so far useful if they provoke discussion, which is the road to truth, that ought to be the object of all our investigations. I am fully aware that before we can pronounce with confidence upon any of the important points that have been raised in this memoir, more extensive researches must be carried out. Up to the present time no cranium has been discovered to supply a cephalic index, whereby a knowledge of the general type of race to which these people belonged may be arrived at. It is worth any pains, however, to establish such a fact, if possible; for the determination of the cranial type would enable us to draw trustworthy conclusions, and is exactly that which is required to dispel the mists that still enshroud the pre-historic period of East Devon archæology.

In conclusion, I may state that Sir Edmund S. Prideaux, Bart., has presented to the Albert-Memorial Museum in Exeter the various relics that have been excavated from the barrows situated on his property at Broad Down. It is hoped also that they may constitute the nucleus of a collection available henceforth for the purposes of public instruction and gratification, and specially illustrative of the pre-historic archæology of Devonshire.

Original Documents.

NOTARIAL INSTRUMENT, DATED A.D. 1322, RELATING TO SAINT NECTAN'S CHAPEL, IN THE PARISH OF ST. WINNOW, NEAR LOSTWITHIEL, CORNWALL.

Communicated by JOHN MACLEAN, F.S.A.

IN the parish of St. Winnow, Cornwall, there is an ancient chapel dedicated to St. Nectan, commonly called St. Nighton, the relation of which to the parish church has been repeatedly a subject of contention. St. Nectan was one of many British Saints, who, driven by persecution from their own country, assisted in the evangelisation of Cornwall, and he seems to have been held in much veneration. The church of Hartland in Devon is dedicated to him. He probably dwelt in a hermitage on the spot where the chapel in the parish of St. Winnow stands. A farmhouse, about half a mile distant, situate on the main road by which the chapel is reached, bears the name of "Tol-gate," or "the road to the cell." St. Nectan, it is said, while walking in a wood at a place called "Nova villa" adjoining his abode, was suddenly attacked by ruffians, and by them beheaded. It is, however, uncertain whether this happened in the neighbourhood of Hartland or at St. Winnow. There is a tenement called Newington very near the chapel in the latter parish. This may possibly have been the scene of the murder. His martyrdom was anciently commemorated on June 17, and the day was observed not merely locally, but at Launceston, St. Michael's Mount, and elsewhere in the county.

In a large collection of deeds in my possession there is a copy, made in the seventeenth century, of an agreement entered into between certain parishioners of St. Winnow and the vicar of the parish for the settlement of a matter that had been in dispute. The parties appeared before the Consistory Court at Exeter by their respective *procuratores* or proctors, and the convention is attested before the Official of the Bishop of Exeter (Walter de Stapeldon). It is dated 3 April, 1322, and it appears by the endorsement that the original was formerly in the possession of Philip Leach, Vicar of St. Winnow. As the document is now, it is believed, lost, this old copy possesses greater value than it would otherwise bear, whilst its character would seem to render it of more than local interest. Philip Leach held the Vicarage of St. Winnow from 1639 to 1681.

It will be seen that by this agreement the parishioners engage to withdraw an appeal which they had made to the Archbishop against a previous decision of the Court, that had been adverse to them—they acknowledge the claims of the Mother Church of St. Winnow, and agree to certain arrangements now proposed; to which, on the other part, the Vicar binds himself and his successors: viz. that there shall be a celebration in the chapel (which is to be kept suitably in order by the parishioners) on the following feasts, namely the Nativity of our Blessed Lord, the Circumcision, the Purification of the Blessed Virgin Mary; on Monday in Easter week, Whitsunday, St. Nectan's Day (17 June), and on each Friday in the first five weeks of Lent, when confessions shall also be heard. These Fridays were to be changed to Wednesdays, if the Friday should be one of the greater festivals, desig-

nated "novem lectionum,"¹ or a corpse be lying in the mother church of St. Winnow.

The names of many of the farms mentioned in the document still exist in the parish; and probably the whole would have been found at the present day had not a large portion of the district east of St. Nectan's been absorbed by Boconnoc park.

The dispute on the subject of the services at St. Nectan's was long and warmly contested, and one object which I have in bringing this document under the notice of the members of the Institute is the hope that it may lead to the discovery of other records relating to the case. It is probable, moreover, that the episcopal registers at Exeter may contain evidence on the subject.

The present Vicar of the parish conjectures that shortly before the date of this document the chapel had been rebuilt, and he writes that one old window, of which in making some additions to the chapel he had reproduced an exact copy, was certainly an Early middle-pointed window of three lights, which would be assigned to the beginning of the fourteenth century.

It is curious that a similar dispute arose in the parish three centuries later respecting the services to which the Chapel of St. Nectan was entitled, which resulted in an appeal being made to the then Bishop of Exeter (Dr. Joseph Hall). His reply, dated 24th June, 1628, which will be found subjoined, is recorded in the parish register. His decision was that there should be service at the parish church on Sunday mornings, and at the chapel in the afternoon; and this arrangement obtains at the present time.

The tower of the chapel was more than half destroyed in the Civil Wars of Charles I., and has never been rebuilt. It stands about midway between Boconnoc, where the king lay, and Lostwithiel, which was occupied by the parliamentary forces, and there were several hard contested fights in the neighbourhood. About 70 or 80 years ago, in some alterations then made for the accommodation of the congregation, the altar was removed and the place where it had stood entirely occupied by pews. A chancel having been added, and an altar erected by voluntary contributions, it is expected that this new fabric will shortly be consecrated. The chapel is a Chapel of Ease for the whole parish generally. It has no separate district, rates, or wardens; baptisms and marriages have always been celebrated there, and there is a burial ground attached.

My thanks are due to the Rev. George Hill, the present Vicar of St. Winnow, for his courteous reply to my enquiries respecting St. Nectan's, and for information on the subject that has been embodied in the foregoing remarks. Through his kindness also a transcript of the letter from Bishop Hall, above mentioned, has been supplied.

In Dei nomine, Amen. Per presens publicum instrumentum cunctis appareat evidenter quod anno Domini ab incarnatione millesimo, trecentesimo, vicesimo secundo, indictione quinta, Pontificatus sanctissimi patris ac domini, Domini Johannis, divina providencia Pape, vicesimi secundi anno sexto, in presencia mei Johannis Notarii infrascripti et testium subscriptorum, comparuerunt coram discreto viro domino officiali

¹ "Festum novem lectionum, in quo novem lectiones dicuntur in matutinis, cujusmodi sunt majora festa." Ducange.

Domini Exoniensis Episcopi sedente pro tribunali in majori ecclesia Exonie, solito loco consistorii ejusdem, tercio die mensis Aprilis, Phillippus de Combe clericus, procurator Willielmi Donnad, Roberti de la Wydell, Henrici de Disse, Senarii de Collawoda, Johannis de la Leghe, Ricardi de la Welle, Thome de Bodon² et ceterorum parochianorum Sancti Wynnoci, villarum de Donnad, Delywyde, Crastis, Combe Donnad, Trewegga, Bodon, atte Welle, Brin, Pennaveron, Disse, Collawoda, Trecarep, et Sancti Nectani,³ qui se parochianos Capelle Sancti Nectani in Cornubia a matrici ecclesia Sancti Wynnoci dependentis asseruerunt, in lite mota inter eosdem, ex parte una, et dominum Reginaldum perpetuum vicarium ecclesie Sancti Wynnoci [super ?] sacra cantaria in predicta capella habenda, ex altera, dictus videlicet Phillippus procurator premissorum parochianorum⁴ dicte Capelle se pretendendum, et Johannes Coks clericus procurator dicti domini Reginaldi vicarii antedicti, quorum procuracionum tenores, que vidi, tenui, legi et diligenter inspexi de verbo ad verbum, tales sunt— Pateat universis per presentes quod nos Willielmum Donnad, Robertus Delywydell, Henricus de Dysse, Senarius de Collawoda, Johannes de Leghe, Ricardus de la Welle, Thomas de Bodon et ceteri parochiani Sancti Wynnoci villarum de Donnad, Delywydell, Crastis, Combe, Donnad, Trewegga, Bodon, Atte Wille, Brin, Pennaveron, Dysse, Collawoda, Trecarep et Sancti Nectani, qui nos parochianos Sancti Nectani in lite mota inter nos, actores, ex parte una, et dominum Reginaldum perpetuum Vicarium ecclesie Sancti Wynnoci, reum, ex altera, super cantariam in eadem Capella habendam pretendebamus. In qua lite sententia diffinitiva concernens nos et pro dicto Vicario absolute lata extiterat, et per nos ab eadem sententia appellatum facimus, ordinamus et constituimus per presentes dilectum nobis in Christo Phillippum de Combe, clericum, verum et legitimum procuratorem ad renuntiandum nomine nostro quibuscunque appellacionibus per nos aut nomine nostro qualitercunque occasione predicta interpositis; ac etiam ad confitendum nos parochianos ecclesie Sancti Wynnoci predictae immediatos fuisse et esse eidem ita quod ecclesie nostre parochiali et matrici Sancti Wynnoci jura parochialia facere; ac etiam onera parochianis dicte ecclesie Sancti Wynnoci incumbencia agnoscere, necnon matricem ecclesiam nostram Sancti Wynnoci antedictam, diebus quibus filii Deo devoti frequentare tenentur, frequentari teneri confessionemque dicti Vicarii de cantaria certis diebus in capella Sancti Nectani faciendam audiendum, transigendum, componendum, et omnia alia et singula faciendum que ad premissa speci-

² In the old transcript the name had been written "Godon," but here, and also in most places where it occurs, it has been altered by a second hand to "Bodon." In the original document the letters B. and G. may have much resembled one another, and the transcriber has written "Grin, Grythewalle, Gloyon," etc., which have in like manner been altered.

³ According to information that we owe to the kindness of the Vicar of St. Winnow, amongst the townships here enumerated Delywyde is probably Della-whidden, of present times; there is also Windell or Bodwindell; La Welle or Atte Well is doubtless Tawell; Bodon may be

recognised as Bawdoc; Colwood, Trevego, and Brin are modern names of places in the parish; Pennaveron is probably Pen-navarra; and Trecarep the present Tredarrup. All these are situated on the side of the parish nearest to St. Nighton's Chapel.

⁴ In the transcript, "parochianos." It should be observed that several errors, mis-spellings, etc., that must be attributed to the transcriber in the seventeenth century, have been corrected in printing the document; for instance, "simule," for simile, "Apostali," for Apostoli, and the like.

aliter vel in genere necessaria fuerunt aut oportuna, eciam si mandatum exigant speciale, rem ratum haberi et iudicatum solvi pro eodem procuratore nostro sub ypotheca rerum nostrarum promittimus et exponimus cautiones. In cujus rei testimonium sigillum Decani de Westwenelshire⁵ presentibus apponi procuravimus. Data apud Sanctum Vepum, die Veneris proxima ante festum Sancti Mathie Apostoli, anno Domini millesimo, trecentesimo, vicesimo primo.—Pateat universis per presentes quod ego Reginaldus perpetuus vicarius ecclesie Sancti Wynnoci in Cornubia facio, ordino et constituo dilectum mihi in Christo Johannem Coks meum verum et legitimum procuratorem ad comparandum coram officiali Domini Exoniensis Episcopi, vel quocunque iudice in curia dicti Domini Episcopi presidente, ad confitendum et recognoscendum me et successores meos in eadem ecclesia Sancti Wynnoci vicarios pro bono pacis imperpetuum teneri ad celebrandum in capella Sancti Nectani in Cornubia a matrici ecclesia Sancti Wynnoci antedicta dependente, vel celebrari faciendum, dum tamen competenter sumptibus parochianorum ornata fuerit, unam missam diebus natalis Domini mediam, videlicet, sub officio *Lux fulgebit*,⁶ Circumcisionis Domini, Purificationis beate Marie Virginis, die Pasche, secundo die Pentecoste, die Sancti Nectani, et in quinque sextis feriis quinque primarum septimanarum quadragesime; dum tamen festum novem lectionum aut corpus presens in matrici ecclesia Sancti Wynnoci non occurrat. Et si per premissa vel uno premissorum impedimentum contingat, videlicet per divinum officium in matrice ecclesia precipue hiis diebus celebrandum, quominus in illis sextis feriis prenomiatis poterit in capella Sancti Nectani predicta per vicarium Sancti Wynnoci celebrari, in quartis feriis earundem septimanarum quadragesime, nisi simile impedimentum contingat ad dictam cantariam faciendum, confessionem emittendum, pronuntiacionem audiendum, necnon ad confessiones eorumdem qui se de eadem parochia pretendunt diebus quadragesimalibus predictis, usque ad horam terciam dierum predictarum, si venerint, audiendum. Ad que faciendum et condemnationem subeundum, ac eciam confessionem ex parte eorum qui se pretendunt parochianos esse capelle Sancti Nectani predictae emittendam, audiendam eidem procuratori meo potestatem do specialem per presentes, necnon ad omnia alia et singula faciendum que ad premissa necessaria fuerunt aut oportuna, eciam si mandatum exigant speciale, ratum et gratum habiturus sub ypotheca rerum mearum quicquid dictus procurator meus fecerit aut procuraverit in premissis. In cujus rei testimonium sigillum discreti viri Officialis Domini Archidiaconi Exoniensis presentibus apponi procuravi. Data Exonie, die Sabatha proxima ante festum Sancti Sulpicii, anno Domini millesimo, tricesimo, vicesimo primo.—Qui quidem procuratores nomine dictorum dominorum suorum ibidem recognoverunt quod in predicta lite alias inter partes supradictas mota dicti parochiani coram commissario venerabilis patris Domini Walteri, Dei gracia Exoniensis Episcopi, sententiam reportarunt contrariam, et dictus vicarius absolutionem quia ad dictam cantariam perpetuam minime tenebatur, ab qua

⁵ The parish of St. Winnow is situated in the rural Deanery of West, as shown in the Map of the Diocese of Exeter given in the *Valor Ecclesiasticus*, Henry VIII. vol. ii. This Deanery appears formerly to have been known as "West Wenelshire;" the parishes therein contained, with those

of the adjacent Deanery still called "East," may probably have constituted the ancient hundred of Wenelshire.

⁶ On Christmas morning there are three masses. For the second mass the *Intruit* is taken from the words of Isaiah, c. ix. v. 2. "*Lux fulgebit*," etc.

quidem sententiam dicti parochiani se suggerebant ad audiendum dicti patris appellasse, et in eadem appellationis causa per commissarios dicti patris ad priorem iudicem remissos fuisse, cujus pretexto ex parte dictorum parochianorum, ut dicebatur, ad sedem apostolicam et pro concione⁷ Curie Cantuariensis fuerat denuo appellatum; dictus vero Johannes procurator parochianorum sic pretensorum antedictus, nomine dominorum suorum, bonam fidem agnoscens et pacem affectans, omnibus appellationibus interjectis, occasione premissa sponte renunciavit et dictos dominos suos parochianos predictae ecclesie Sancti Wynnoci immediatos fuisse et esse pure, sponte et absolute fatebatur eos pertinere ad jura parochialia eidem ecclesie Sancti Wynnoci facienda, ac etiam ad agnoscenda onera dicte ecclesie Sancti Wynnoci incumbencia, necnon ad frequentandum eandem, prout filii Deo devoti suam matricem ecclesiam frequentare tenentur. Et predictus Johannes, procurator dicti domini Reginaldi vicarii antedicti, suo procuratorio nomine pro bono pacis et concordie fatebatur dictum dominum suum et successores suos teneri ad celebrandum vel celebrari faciendum in capella Sancti Nectani servicia, dum tamen competenter sumptibus parochianorum ornata fuerit, unam missam diebus Natalis Domini mediam, videlicet, sub officio *Lux fulgebit*, Circumcisionis Domini, Purificationis beate Marie Virginis, die Pasche, secundo die Pentecoste, die Sancti Nectani, et in quinque sextis feriis quinque primarum septimanarum quadragesime, dum tamen festum novem lectionum, aut corpus presens in matrice ecclesia Sancti Wynnoci antedicta non occurrat. Et si per premissa vel unum premissorum impedimentum contingat, videlicet per divinum officium in matrice ecclesia, precipue hiis diebus celebrandum, quominus in illis sextis feriis prenomminatis poterit in capella Sancti Nectani predicta per vicarium Sancti Wynnoci celebrari, in quartis feriis earundem septimanarum quadragesime, nisi simile impedimentum contingat ad dictam cantariam faciendam, necnon ad confessiones eorundem qui se de eadem parochia pretendunt diebus quadragesimalibus predictis usque horam terciam dierum predictarum, si ibidem venerint, audiendum. Ad que quidem servicia et in suis procuratoriis predictis contenta facienda et agnoscenda dicti procuratores dictos dominos suos per officialem memoratum petebant condemnari, unde idem officialis dictorum procuratorum confessiones modo quo permittent hinc inde emissas secutus eosdem procuratores et dominos suos predictos in personas eorundem ad observacionem premissorum, et eorum que in suis procuratoriis continentur per sententiam precepti condemnandum. Et mihi Notario supradicto premissa acta et gesta omnia et singula scribere et publicare mandavit. Presentibus Magistris Henrico Bloyon,⁸ Rectore ecclesie de Lanyhorn, Roberto Bonda, Richardo Giffard, domino Johanne Bythewalle capellano, et Henrico de Loston, testibus vocatis et rogatis, et aliis multis premissa videntibus et audientibus.

Et ego, Johannes Piltone clericus, Exoniensis diocesis, publicus autoritate apostolica Notarius, premissis omnibus et singulis prout supra conscribuntur, anno, Indictione, Pontificatus, die, mense et loco prelibatis, una cum testibus prenomminatis presens interfui, et ea sic fieri vidi et audiui, ipsaque et procuratoria

⁷ *Sic*, query for concione.

⁸ Gloyon, altered by a second hand to Bloyon; in the context Gonda has also

been changed to Bonda, and Gythewalle to Bythewalle.

supradicta procuratorum, (videlicet) predicti Philippi Combe sigillo decani de Westwenalschire mihi satisficio,⁹ et procuratorium predicti Johannis Coks sigillo officiali domini Archidiaconi Exoniensis Episcopi similiter mihi bene noto consignatum, ad mandatum dicti domini officiali Domini Exoniensis Episcopi fideliter scripsi, publicavi, in hanc publicam formam redegei, ac una cum sigillo ejusdem domini officiali domini Exoniensis Episcopi signum meum presenti instrumento meo apposui consuetum rogatus in fidem et testimonium premissorum.

Endorsed.—A copy of an ancient writeinge concerneinge St. Nighton's Chappell; the originall is now in the possession of Phillipp Leach Viccar of St. Winnowe.

LETTER FROM THE BISHOP OF EXETER TO THE PARISHIONERS OF ST. WINNOW;
EXTRACTED FROM A REGISTER BOOK OF THAT PARISH.

June 24, 1628.

A true copy of the worthy Lord Bishop's letter unto the Parishioners of St. Wynnove, as followeth:—

To my loving friends Mr. Lower, Mr. Symons, and the Parishioners of the parish of St. Wynnove, whose names were published to a late petition concerning this chapel of St. Nighton's.—Salutem in Christo.

Howsoever I gave answer to your petition exhibited to me lately concerning divine service at your mother church of St. Wynnove twice every Sunday, that at my visitation I would determine the business; yet since Mr. Leach, your minister, hath been to me, and given me full information of the state both of your church and chapel of St. Nighton's, and how the practice hath been from time to time, and the convenience of both places, I cannot apprehend how any better course can be taken or held for all party than that which for these last 26 years hath been taken, by the peaceable and loving consent of all sides,—That one and the greater part of the parish should divide the time with the lesser, and that each part should comply with other, so far as to present themselves by course to either church, which why it could now be altered after so long quiet approbation I cannot conceive. For if the privilege of a mother church may challenge the more duty, yet the multitude of the hearers and the length of the way may seem to more than countervail it on the other side. So, as my judgment is, that each part content themselves with that course of resorting to the church of St. Wynnove in the forenoon, and unto the chapel of St. Nighton's in the afternoon. But if better reason can be shown at my visitation, I shall not be unwilling to hear it. In the meanwhile I bid you farewell.—Your loving friend and diocesan,

(Signed) JOSEPHUS EXON.

SUPPLEMENTARY NOTES ON ST. NIGHTON'S CHAPEL.

THE collection of parochial antiquities of the diocese of Exeter, published by Dr. Oliver in 1839, does not include the parish of St. Wynnove; but in a slip printed in a local paper, and kindly supplied to me in 1852, the worthy Doctor stated the result of his inquiries relating to this parish, and also to the chapelry of Nectan, or Nighton, which bears on the matter litigated on the occasion recorded in the document.

⁹ *Sic*, query for *satisficiente*.

Dr. Oliver states that the hamlet of St. Nighton, or Nectan, was formerly a distinct parish, for which he cites a survey, or inquest, dated A.D. 1281, showing the state of that chapel, under the name of the "Parochia Sancti Nyctani." Lysons, in his History of Cornwall, has also referred to a later authority, which assigns to it the like parochial character. This was, perhaps, the foundation of the subsequent disputes between the Vicar of St. Winnow and some of his reputed parishioners, for whose benefit the separate chapelry was probably established.

The documents copied in the instrument as given by Mr. Maclean, have come down to us in a very unsatisfactory condition. We may, however, collect with tolerable precision the *lis mota* between the parties, and the compromise by mutual concession which settled, or was intended to settle, the matters in issue between them.

The instrument itself is, in fact, a notarial certificate of the proceedings in the Consistorial Court of Exeter, during the episcopacy of Bishop Stapeldon, dated 1322, reciting a prior decision against the parishioners, complainants, and in favor of the vicar, against which an appeal had been entered by them. Proctors, or proxies, had been appointed on both sides, to carry out the special agreement of the parties, and to obtain the sanction of the court below for it. The fact of the parochiality of St. Nighton is not, in terms, settled by it; but the complainants, who seem to represent the district, or vill, of St. Nighton, and who claim to be its parishioners, admit themselves to be also the parishioners of St. Winnow, and assert their claim to the ministrations of the vicar in their own chapel; and their immediate object was, to a certain extent, obtained by them by the final award of the court. It was not denied that they owed all such duties and services as were incidental to the relation of an affiliated church or chapelry to the mother church; and that the vicar was bound to officiate therein, so far as was consistent with the claims of the other parishioners of St. Winnow. The subsequent reference of the parties to Bishop Hall, in 1628, seems to have first sanctioned a practice, which had before prevailed, and which divided the vicar's services between the two churches. The relative position of an ancient parochial church and an affiliated chapelry can only be exactly ascertained by a knowledge of the circumstances in which that state of things originated.

The Deanery of West, or West-wenelshire, was so named from the ancient Hundred of that name. There was probably (as Mr. Maclean suggests) a single Hundred of Wenel, or Wevelshire, which was subsequently divided into the present Hundreds of East and West, called in the Taxation of Pope Nicholas, East- and West- "Wellshire." Parishioners, as such, have no common seal, and their procuration was, therefore, authenticated by the Rural Dean of the district affixed in the parish of St. Veep.

There is some obscurity as to the meaning of that part of the proceedings which professes to recite the prior proceeding in the Consistory Court. It seems to me to import that the complainants had threatened an appeal to the Roman See, either *per saltum*, or "*pro correctione curiæ Cantuarensis*." See Corvini Jus Canonicum, cited in Reeves' English Law, vol. ii. p. 31, ed. 1787.

EDWARD SMIRKE.

Proceedings at Meetings of the Royal Archaeological Institute.

ANNUAL MEETING AT LANCASTER.

Tuesday, July 28, to August 4, 1868.

THE proceedings commenced with the Inaugural meeting in the Shire Hall, which was well attended by the inhabitants of Lancaster and the neighbourhood; but the political circumstances of the country interfered with the presence of many of the local notabilities, and the distance from London doubtless diminished the attendance of members. Among those present were, Lord Talbot de Malahide, President of the Institute, Col. the Right Hon. J. Wilson Patten, M.P. (Chancellor of the Duchy), President of the Meeting, the Mayor of Lancaster (T. Storey, Esq.), Sir Thos. E. Winnington, Bart., M.P., Sir Stephen R. Glynne, Bart., W. J. Garnett, Esq., E. Sharpe, Esq., E. Dawson, Esq., the Rev. Dr. Lee, Dr. Moore, and the officers of the Institute.

Having shortly addressed the meeting in an opening speech, the Mayor of Lancaster called upon the Town Clerk to read the Address voted by the Corporation to the Institute.

The Town Clerk then read the following Address :—

“To the President and Members of the Royal Archæological Institute of Great Britain and Ireland.

“We, the Mayor, Aldermen, and Burgesses of the Borough of Lancaster, desire to offer our hearty congratulations on your arrival in the capital of the County Palatine. We highly appreciate your kind acceptance of our invitation to visit this ancient town and neighbourhood, and on our own behalf and in the name of our fellow-townsmen, we thank you for the honour you have conferred upon us. We remember with pride that the time-honoured spot on which we are permitted to greet you was, centuries ago, a royal residence of high renown, and we trace back our history to ages long before. We have evidence that this was a Roman station of the first order, and that the town of Lancaster occupies the site of an ancient British city. To these historical reminiscences it is scarcely necessary to add that Lancaster ranks among the most ancient boroughs of England, receiving its charter from King John; and that its representatives sat in the parliament of the nation as early as the reign of Edward I. In the immediate neighbourhood of this noble castle, possessing so many features of historical interest, in the midst of the beautiful and picturesque counties of the North of England, so rich in antiquities and in the remains of splendid ecclesiastical edifices, you will find, we trust, abundant facilities for antiquarian researches, and an

agreeable and instructive opportunity for the investigation of subjects of archæological interest.

"We congratulate the Institute on the results of its past labours. Its researches have largely contributed to our historical records, and have brought to light the remains of antiquity long concealed from observation. It has also done much to prevent the desecration and destruction of our national monuments, and to transmit to posterity those noble examples of skill and piety which our forefathers reared, and bequeathed to the care of their successors. Passing, as we are, further and further away from the era in which those monuments originated, we feel that their preservation becomes an object of greater consideration and a national duty, and we desire to recognise the valuable services of the Institute in this department of its work.

"Given under the Common Seal of the said Borough this 28th day of July, 1868."

The MAYOR then said,—My Lord Talbot, I have great pleasure in presenting this Address from the Corporation of Lancaster, and permit me, in doing so, to offer my hearty welcome to the Institute.

LORD TALBOT DE MALAHIDE expressed the pleasure with which he and the Institute generally received such expressions of welcome on the occasion of their annual gatherings. After speaking of the important part which corporations could act in the preservation of the monuments of the past, his Lordship introduced Col. Wilson Patten as the President of the meeting in these terms:—"I am truly happy to resign the office of President for a time in favour of a friend of mine who, I am sure, will acquit himself of this duty equally as well as he has acquitted himself of the many and arduous duties he has so well performed, and to the satisfaction of all. Col. Wilson Patten is a very old friend of mine. We were in the House of Commons together a good many years ago, and although perhaps we have not met so often as I could wish, yet still at intervals we have met, and had opportunities of intercourse. To an audience consisting of men and women of Lancaster, it is not necessary for me to state in detail the many high qualities which render him so fit for the office I am about to propose to him. I agree that archæologists are seldom devoid of courtesy, and therefore I need not state that the great courtesy of my friend is one of the things that recommend him particularly to our notice. Urbanity of manner and kindness of heart are some of those graces that smooth the path of life and the intercourse between man and man, and though many distinguished individuals contrive to get through the world without them, and perhaps to acquire the regard and esteem of persons who value them for their own sterling qualities, yet still every man must feel their loss; that without them he places himself in an unfortunate position among his neighbours, and that a great proportion of the happiness of life is thereby lost."—After adverting to the main objects that would engage the attention of the meeting, Lord Talbot spoke at some length upon the early antiquities of Spain, which he had lately visited, and their analogy to those in other parts of Europe.

Colonel the Right Hon. J. WILSON PATTEN, having assumed the presidency of the meeting, spoke of the indulgence he required in taking the office that had been conferred upon him. He continued,—“I believe that

a man must be very apathetic indeed who does not take an interest in the history of his country, or in any of those subjects which are the immediate topics of inquiry to the archæologist. Nothing that I could say would add the slightest interest to any of those numerous subjects that I hope we are going into during the session of the Institute in Lancaster. I am come here not to expound, but to listen; and I am not come here as a teacher, but as a pupil; and I am looking forward with great pleasure—as I am sure many others in this hall are also doing—to the information that will be obtained from many of the members of the Institute. Adverting to the early history of Lancaster—he hoped something would be told them of the early inhabitants, where they came from, and when they used to paint their bodies *blue*. As it was the colour of the political party he represented, he was particularly curious even as to its shade,—was it the colour they called “true blue?” Colonel Patten concluded by speaking of the ancient records of the Palatinate, and of the arrangements he had made for their being accessible to the visitors to the meeting; and then occupied the chair.

W. J. GARNETT, Esq., begged leave to offer a few words of welcome on the part of the nobility and gentry of Lancaster and the district to the Royal Archaeological Institute. He felt a personal interest in the work of that Society, and he felt they were honoured by its presence among them. It was gratifying to those he so unworthily represented, that the Chancellor of the Duchy, who had been so long connected with North Lancashire, had been selected as the President of the meeting. There were very many objects of interest in the district, and they who were able to visit them in the company of those who had long made such subjects their study, would view them with new eyes, and get fresh ideas from them. After referring to some interesting objects on his own land, he resumed his seat.

E. SHARPE, Esq., had great pleasure in seconding the welcome offered by Mr. Garnett. He believed that the interest taken in such subjects in that district was at least equal to that taken in other parts of the country. There was nothing, in his idea, which brought the events and scenes and facts of history so forcibly and palpably to their minds, as the existence of public buildings of antiquity, documents, and other tangible proofs of those scenes and events. The preserving of those monuments of antiquity, their verification and examination, so as to show the evidence of the proof they afforded of history, was the vocation of the archæologist. That was enough to make all look upon societies like the Institute as useful and important public bodies; and indeed he thought that all would admit that it betokened a healthy tone in the nation, when an interest was taken in its landmarks; and he hoped they were long removed from the time when that interest should have failed. He thought, therefore, they would have no difficulty in being unanimous in tendering their welcome to the Institute.

Sir THOMAS E. WINNINGTON, Bart., M.P., rose and said,—As a member of the Council of the Royal Archaeological Institute, I have to express our great gratification at the reception which has been provided for us in the ancient and historic borough of Lancaster. Many are the objects of interest in the town and district, and I augur that this will be one of the most gratifying of our gatherings. I am specially delighted to meet under the presidency of one whom I have for thirty years known as a

member of the House of Commons, and whose painstaking care in performing his duties in that House has made him, in fact, a model county member.

T. GREENE, Esq., begged leave to offer the congratulations of the magistrates to the Institute, on having come to Lancaster to hold their meeting. He could assure them that the magistrates of the county had desired him to express the deep interest they felt in the prosperity of the Institute, and also that they believed a large amount of information would be derived from their meeting.

E. DAWSON, Esq., said it was a gratification to him to second the proposition of Mr. Greene. He heartily welcomed the Institute to that town, and he also warmly welcomed the President of the meeting, the successor to that noble lord who had long held that office with much credit to himself, and benefit to the Society. He welcomed them, not only on the part of the magistrates of that division, but on behalf of the magistrates of the whole county.

The Rev. Dr. LEE said he had to offer the congratulations of the clergy of the district to the Institute for coming to Lancaster. The clergy looked upon it as a great advantage that so large a body of gentlemen, interested and learned in antiquities, should be brought together in that town to prosecute their researches. He hoped that all the old churches in the district would be visited, and he was sure the clergymen would be glad to open the doors of their churches for the inspection of the Institute. He was sorry that the Vicar of St. Mary's was unable to be present to welcome them in person.

The Rev. T. C. ROYDS seconded the proposal; and, with the announcement of the programme of the day by the Rev. E. Hill, the proceedings of the Inaugural meeting were brought to a close.

In the afternoon, the castle was visited, under the guidance of Mr. Parr, the Governor, and Mr. E. G. Paley.

Of its original buildings, Lancaster Castle—which was many years ago converted into the county gaol, and fitted up with Assize Courts and their appurtenances—now retains only four; the two towers called Adrian's Tower and the Well Tower, which are said to be of Roman origin;—the central Norman keep, built in all probability by Roger of Poitou, and the entrance gateway, built originally towards the end of the twelfth century, and re-cased in the time of John of Gaunt. The Keep is a noble massive work, of unusual dimensions (nearly 70 feet square). The upper portion of the work was, doubtless, restored late in the sixteenth century, when all the strong places of the kingdom were put in condition to resist the threatened Spanish invasion. On one of the stones of the battlement is the inscription, "E. R., 1585." At the western angle of this keep is a square turret, which appears to have retained its original construction and condition. It is called after John of Gaunt, and within it is a stone seat, still called John of Gaunt's chair. It doubtless marks the extension of the keep in the fourteenth century. The panoramic view to be obtained from this turret on a clear day is marvellous in its extent and variety. But this point was difficult of access to a large party, and so, in fact, were some of the other principal points of interest in the castle, so that they were examined in detail by the party rather than *en masse*.

Leaving the castle, the visitors went to the parish church of St. Mary, which is a building of the fifteenth century, and of stately proportions in

the interior. It contains some elaborate wood carving, now placed as a kind of reredos along the whole length of the eastern end of the edifice, and consisting of stall-work of excellent character. The tradition is, that it is of foreign manufacture, and was brought from the neighbouring Abbey of Cokersand, at the Dissolution.

Here Mr. PARKER discoursed upon the peculiarities of the structure, and started a hypothesis to account for them that is worth corroboration or refutation. He summarily disposed of the legend as to the beautiful wood-work, by saying how very common a story it was to attribute such things to foreign agency because they were good. He disputed the probability of its having come from so small an establishment as Cokersand, and thought all difficulties would be met by suggesting that the church was originally designed to be a collegiate establishment. In that case, the differences in the architecture were accounted for, together with the hustling away of the stalls from their proper place when the design of the church was changed.

After the visit to the castle and church, the party passed on to the temporary Museum in the Assembly-rooms, to hear a discourse by the Venerable Archdeacon Moore, on Egypt and the Holy Land. This discourse was illustrated by a valuable and extensive series of drawings made by Mrs. Moore during the years 1864-5. From this lecture parties wandered at their will over the town. A feature of some antiquarian interest in the town, is a kind of stone door-head peculiar to the district, of which Lancaster possesses a few examples in "China Lane," (the ancient High street,) and other old quarters of the town. There is something special in this simple ornamentation of the massive stone which often covered the threshold. The fashion prevailed for some miles round Lancaster in buildings of the latter part of the sixteenth and seventeenth centuries, and generally takes the shape of two circles interlacing or meeting each other, or simple curved lines, with the date plainly carved in the centre. The ancient hostelry, the King's Arms, where a goodly section of the archaeologists were quartered, was also an object of great interest. It is a building of plain exterior, but full within of oak carvings, massive stairs and balusters, long galleries, time-honoured portraits, high-backed chairs, ancient china and antiquated relics of all kinds. And the interest in these remarkable objects has been well brought down to the present day by the skilled pens of Charles Dickens and Wilkie Collins, which have made them memorable in well-known pages.

In the evening a *soirée*, or *fête champêtre*, was given by the Mayor of Lancaster, at his residence, Westfield House, at which a large number of ladies and gentlemen availed themselves of the courteous and hospitable invitation of his Worship. The band of the Preston Artillery corps was engaged for the occasion, and performed some excellent music. A shower unfortunately came down shortly after the arrival of the guests, which prevented their full enjoyment of the beautiful gardens and grounds, brilliantly decorated with Chinese lanterns, and drove them into the marquees—in which a sumptuous entertainment was provided for them.

Wednesday, July 29.

A meeting of the Historical Section was held at 10 A.M. in the Music Hall; Lord TALBOT DE MALAHIDE presiding.

Mr. BEAMONT, of Warrington, read a paper entitled "Notes on the Lancashire Stanleys, with particular reference to Sir John Stanley of Honford." In this paper an interesting account was given of how the Stanley family came into Lancashire from Staffordshire and Cheshire. Sir John Stanley, a successful soldier under Richard II. and Henry IV., was the first of the family to settle in Lancashire, where he soon won the hand of a great heiress, Isabel de Lathom. Owing to this union being without issue, it was said that a child was adopted that had been rescued from an eagle's nest, and thus originated the Stanley crest, the eagle with her swaddled child; but the legend did not bear critical examination. The pedigree of the Stanleys, one of the best, if not the best in the county, is not without doubtful passages in its earlier stages. Mr. Beamont dealt in detail with several of these doubtful passages, illustrating his remarks by many extracts from contemporary and later writers, descriptive of the characteristics of the persons referred to, of events in their lives, or the histories of their times. Coming down to Sir John Stanley of Honford, in Cheshire (the son of the Bishop of Ely), who fought so conspicuously at Flodden Field, Mr. Beamont spoke of the intensity of his religious feelings, which eventually induced him to separate from his wife and enter the Monastery of Westminster as a common monk. His will, made just before his entering "into religion," was among the archives of the Abbey of the Westminster, together with a formal account of the solemn act of divorce and separation. These had lately been brought to Mr. Beamont's notice; and his paper concluded with a summary of their contents, and comments upon them.

In a meeting of the Section of Antiquities (which followed the preceding paper), Dr. MOORE, in the absence of the author, read a Memoir On the Bone Caves of Cartmel, by J. P. Morris, Esq., of Ulverston. The writer commenced by calling attention to the fact that the discovery of caverns in various parts of the country, containing the bones of man, with rude objects exhibiting his handiwork, had opened out to antiquarians and others interested in the collateral sciences of Geology and Archaic Anthropology, a new and interesting field for observation. These ossiferous recesses had been frequently met with in the limestone regions of Northern Lancashire; and two of them, those of Kirkhead and Cartmel, had been subjected to a certain degree of exploration. The Kirkhead Cave is situated on the western side of a steep hill in Cartmel, near to Kent's Bank, and was noticed in a poem by Mr. John Briggs, in 1818, thus:—

" Here might some Druid's sacred circle stand,
And Kirkhead Cave his bone asylum be."

In 1853, it was visited by Mr. Boulton, Mr. Salmon, F.G.S., and Mr. Middleton, when some human remains were met with; but it was reserved for the author of the paper, with Mr. Salmon and others, to make a more complete investigation in 1863. They found the surface of the deposit to consist of a reddish-brown earth, of a clayey character, intermixed with human and animal bones, charcoal, angular fragments of limestone, &c. On this being partially removed, a fragment of rude pottery was discovered, of a very primitive character, which had no traces

of kiln-drying, or of the potter's wheel; this, with other specimens afterwards found, appears to have been formed from the clay of the neighbourhood, and to have been burnt from the inside. There was also discovered here a coin of Domitian, a portion of an iron axe, hammer, and knife, all of Roman type. In a hole in the centre, was found the metatarsal bone of a pig, through which a hole had been drilled, the object of which is unknown. There were found in the cave, bones of the ox, badger, deer, goat, and fox, many of which had been split to extract the marrow. There was also discovered a bronze buckle-brooch and pin, a highly finished bronze implement of the broad axe type, a small bronze tube, which had probably formed a needle-case, &c. Professor Busk, to whom the human bones were submitted, declares them to be of a small race of men. In the other bone-cave, viz., that of Capeshead, near Cartmel, human bones, and specimens of coarse unglazed pottery, were discovered.

Dr. MOORE then read an Essay by Dr. H. Barber of Ulverston, on "The Pre-historic Remains of Furness." He commenced by remarking that the evidences of the ossific caverns were amongst those which carry man farthest back into the regions of time. The traces of man's existence in this country at very early periods when Europe was passing through the "Fluvial drift" period of the world's geological history, was shown in the reliquary caves such as are met with at Capeshead and Kirkhead. He then proceeded to give a description of the Kirkhead Cave, and the very interesting remains which had been discovered in it. The Capeshead Cave is of large dimensions, in a limestone rock which projects at the point where the estuary of the Leven opens out upon the Ulverston sands. The cave was much disturbed during the formation of the "Oversands" railway, several yards of rock at the entrance having been blasted away. The Duke of Devonshire caused the cave to be cleared to a great extent, but nothing of importance was discovered, the work, unfortunately for the interests of archæological science, not having been conducted under the direction and immediate supervision of any one accustomed to such an undertaking. The floor of the cave consists of fine decomposed granite sand about two or three feet deep, and sufficient evidences of human habitation have been discovered to lead us to hope that at no very distant time the cave will be systematically and thoroughly examined. Other caves are to be found in the neighbourhood of the village of Scales, one of which, Scale Haggs, has been described by Mr. Close. Several huts, circles, or camps are to be seen in this district, the principal one being that known as the "Stone-walls," at Urswick; but of their original design and use we are unable to form more than an imaginative conjecture. Other encampments of a similar nature are to be seen at Foula on the Holmebeck estate, Birkrigg, Coleash near Grizebeck, the Bacon near Nettleslack, &c., &c. The author then discoursed upon the "sepulchral circles," which differ slightly from the hut circles in having a circle of stones or wall of earth of which it is constructed unbroken, while in the hut circles there is a sort of entrance to the circle generally on the east side. One of the circles exists at Birkrigg, and is known by the name of the "Druidical Temple," which, however, if we consider its purpose, is evidently a misnomer. Other sepulchral circles are also to be met with at Knappathan on Kirby Moor, and a remarkable one at Swineshead. The lecturer then proceeded to

notice some cairns, barrows, and other pre-historic remains, that are to be found in such abundance in the region of Furness.

The PRESIDENT then gave some particulars regarding pre-historic remains in the South of France and Spain, which he had lately visited, with a view of showing that they bore a strong analogy to similar remains in this country. He also exhibited photographs and sketches of Druidical circles, monuments, &c., found in different parts of Spain.

Dr. CHARLTON, M.D., Hon. Sec. of the Society of Antiquaries of Newcastle, spoke of the desirability of preserving what were known as "ship barrows," and of not allowing local tradition to be neglected.

Votes of thanks were then passed to the authors of the papers, and the proceedings terminated.

At one o'clock the members and visitors, to the number of about 150, were entertained by the President of the meeting at a magnificent *déjeuner* in the Lower Assembly Room. Colonel Wilson Patten occupied the chair, and was supported by Lord Talbot de Malahide and the Mayor of Lancaster. After the usual loyal toasts had been drunk, the CHAIRMAN proposed "Prosperity to the Royal Archæological Institute." He said the results which followed the meetings of the Institute were much greater than were generally supposed. One result was that they created an interest in every class of society, and a desire to hand down to posterity a correct record of that which had taken place in past ages. In that county they had a sufficient illustration of the need of such a society. When they looked at the old abbeys and saw so small a portion of them remaining, the question naturally suggested itself, What has become of them? Simply this: the materials had either been used in the erection of other buildings, or had been used, as was sometimes the case, in the repair of the roads. The interest which this Institute awakened on this subject had already had the effect of putting a stop to such proceedings, and they had led all the world to believe that it would be a sort of sacrilege to continue it. Any one going abroad would see the same thing in every country in Europe. In Italy, the first thing that engaged the attention of the traveller was the little care that had been taken of the ancient and historic buildings, and he was led to wish there had been an Archæological Institute there. In Rome, the same thing was to be noticed. They found that some of the principal modern palaces had been built entirely out of the remains of the Coliseum. It was a great advantage to have an Archæological Society to put a stop to proceedings of that kind; and he hoped and believed that the custom of destroying antiquarian objects was ended, and he thought they would never again hear of old cathedrals, monasteries, and castles, being pulled down and the materials applied to the purposes of forming new buildings or maintaining the roads. If he (Colonel Patten) was to select one individual who had laboured assiduously to promote the objects and aims of the Institute, he should name that nobleman who had done them the honor of coming amongst them on that occasion—Lord Talbot de Malahide. He was well known as one of the steadiest and most influential archæologists of the day, and any information he condescended to give them on the subject, they might rely upon as sound. Colonel Patten concluded by proposing "Prosperity to the Archæological Institute," coupling with the toast the name of Lord Talbot de Malahide.

Lord TALBOT DE MALAHIDE returned thanks, and said he was at a loss to find words in which to express his feelings. He had always done his best to promote the objects of the Institute, and he did feel rather proud on the present occasion, as he thought the Society owed him a debt of gratitude in having provided a substitute of whom he and they had every reason to be proud. In Col. Patten they had a most able President, and he (Lord Talbot) would be very much mistaken if the right hon. gentleman did not prove a most valuable acquisition to the Society. The speaker concluded by proposing the health of Col. Patten as President of the meeting. The toast having been suitably honoured,

The PRESIDENT replied, and took the opportunity of expressing his regret that the accommodation on that occasion had not been sufficient for all the guests who had arrived. He again enlivened his hearers by his agreeable allusions to the "true blue" colour, and startled the Director of the Excursions, who had spoken of the carriage accommodation for the morrow being reserved for ten ladies only, by his pointed queries as to the favoured "Lancashire witches."

In the afternoon the first excursion of the meeting was made to Heysham, a sea-side village possessing an eleventh-century church and a chapel and cemetery on a bluff promontory in which some graves are excavated in the solid rock. The visitors were received at the churchyard-gate by the Rev. T. C. Royds, the rector. A close inspection of the curious church was made, and special attention directed to the screen which divides the chancel from the nave. In the churchyard were some carved and incised stones that were of great interest. The decorations chiefly consisted of varieties of the cross, some of which were profusely floriated, and some of which had emblems of swords of various sizes and forms, a harp, &c., at their side. Great interest was evinced about the graves in the rock. They consisted of excavations in the solid stone very similar in form to ordinary thirteenth-century stone coffins, except that at the foot was a square hole or socket for a cross or memorial stone. Some of these stones that fitted into the sockets are lying loose about the churchyard. Legends are rife as to the extreme sanctity of the spot as a burial ground, and that devotees at a distance prayed for their bones to be laid here, and arranged for their burial on that spot. It is probable, however, the explanation is simply that the churchyard being very limited in extent, burials were obliged to be made all over its surface; and the rock crops quite up to the surface in several parts.

In the evening, after the return to Lancaster, the Rev. J. L. Petit gave a very full and interesting discourse on Cartmel Priory Church. This was illustrated by a fine series of original drawings most carefully executed. It will be printed in a future volume of the Journal.

Thursday, July 30.

At 9 A.M. a large party left by special train for Piel Castle and Furness Abbey. The well-laden train went on through the delightful scenery of the shores of Morecambe Bay, to the now famous town of Barrow-in-Furness. Barrow is one of those places which has sprung suddenly into fame as a producer of the great metal, iron. The rival Kings of Lancashire, Iron and Cotton, were the subjects of interesting comparison on the occasion of the recent opening of the Barrow docks, and His Grace the Duke of Devonshire's excellent archæological speech on the occasion

is well worth recalling. At Barrow the party were met by the Mayor, Mr. Ramsden, to whose energy and talent so much of the progress of the place is due. Here he had provided two tug-steamers to convey the members of the Institute and their friends to Piel Island, and personally superintended the journey. The short voyage was most enjoyable, and Piel Island was duly reached under a salute of cannon from the Piel Pier.

The picturesque little castle—once the military outwork of the rich monks of Furness, which kept off marauders from the coast—stands at the extreme point of a flat spit of meadow land, on an island separated by about a mile of sea from the long tract of Walney. Its walls are built of the semi-rounded boulders of various coloured rocks which line the shore. The arrangement is similar to that of other “Edwardian” strongholds—a keep of great strength within an inner bailey, surrounded by an outer bailey in which the castle could be secured. The winds and waves had greatly injured the walls on the south and east sides; but the distinctive features of the fabric were easily discernible. Mr. Parker obligingly became spokesman, and pointed out the general features of such structures, and the special history of that particular example, of which, however, very little is known. Mr. Wadham, the agent of His Grace the Duke of Buccleuch, who is lord of the liberty of Furness, had most obligingly made every possible arrangement for the convenience of the visitors, and had provided means of access to seemingly unapproachable portions of the structure.

The steamers returned with the party to Piel Pier, where a train was in waiting to convey them to Furness Abbey. Here Mr. Edmund Sharpe, of Lancaster, gave his lecture, illustrated by a full series of plans and diagrams, which were displayed in the grounds,—before the perambulation of the ruins. In a very instructive and pleasant essay he gave the elementary distinctions of the various periods of architecture included in the fine ruins; and then the origin and history of the Cistercian Order of monks who founded and resided in this noble abbey. He then described all its main divisions—the entrance gateway, the church, the hospitium, the chapter-house, the eleemosynary, the abbot's lodge and chapel, &c. The earliest of these was about A. D. 1160;—the latest, the West tower, being A.D. 1420. On the proposal of Mr. Beresford Hope, M.P., who had only joined the party that morning, a most cordial vote of thanks was passed for the excellent lecture that had been delivered.

After this discourse every part of the structure described was visited, Mr. Sharpe pointing out on the spot the exact characteristics of each. The rich deep red sandstone of which the edifice is constructed, the plain but rich character of the pointed arches, the mouldings and tracery, the consummate skill of the designers in perspective effect and in the harmony of curves and lines, combine to render this grand ruin an object of absorbing interest.

A modern handsome hotel has been erected on the site of an old manor house—or, as some say, of the Abbot's residence. Here the Mayor of Barrow had provided a magnificent repast, for which he had issued many special invitations, so that the party was considerably swollen in numbers, and about 300 persons were most handsomely entertained. Mr. Ramsden took the chair, supported by Colonel J. Wilson Patten, M.P., his Grace the Duke of Devonshire, the Lord Talbot de Malahide, Mr. Beresford Hope, M.P., the Ven. Archdeacon Moore, Sir

Stephen Glynn, Bart., Sir Charles R. Boughton, Bart., the Mayor of Lancaster, Dr. Charlton, &c. There were several toasts and speeches; but the rapid approach of the hour of departure imposed brevity. The toast of the "Royal Archæological Institute" was acknowledged by Colonel Wilson Patten, who, on concluding, proposed the health of the chairman in eulogistic terms. The health of the Duke of Devonshire followed, to which his Grace most cordially replied. At six o'clock the party re-entered the train for Lancaster, much gratified at the results of a day which had been arranged with such obliging consideration to enhance the enjoyment of the visitors, and had comprised within its limits archæological objects of such varied interest and importance.

The annual meeting of members was held in the Music Hall at 9 P.M., Col. the Right Hon. J. WILSON PATTEN in the chair.

The balance-sheet for the year was read by Mr. BURTT, Hon. Sec. In reply to questions from several members as to the precise financial condition of the Institute, Mr. Burtt stated that about 150% were owing at the end of last year on account of the expenses of removal to their new quarters, and that extra subscriptions to meet that expenditure, upon the plan suggested by Mr. Beresford Hope, were rapidly coming in; so that the general fund would, perhaps, not be at all affected by that extra expenditure.

Mr. TUCKER, Hon. Sec., then read the report of the Central Committee.

In presenting their Annual Report of the Proceedings of the Institute your Committee have to put somewhat prominently forward the circumstances of the removal of the offices of the Institute. The term for the occupation of the apartments in Burlington Gardens had expired, and although considerable inconveniences had been sustained by their inadequacy to the requirements of the Institute, your Committee, wishing to postpone the inevitable expenses of a removal as long as possible, made attempts to arrange for a further period of occupancy. In this, however, they were unsuccessful, and after some difficulty the very convenient suite of rooms, in an excellent position, now in the possession of the Institute, at 16, New Burlington Street, were secured upon a favorable lease.

The expenses of removal—of some necessary alterations in the new premises, and of their fitting up, have, however, been considerable; and the Committee thought it a fair occasion to solicit the special contributions of the members for their liquidation. This appeal has been most generously responded to—considerably more than half the extra outlay has been already paid up, and promises given that enable the Committee to feel satisfied that all charge upon the general funds of the Institute on account of the removal expenses will be avoided.

The Committee have therefore great satisfaction in referring to the change which has been effected in the *habitat* of the Institute. The new rooms afford excellent accommodation in every respect—giving ample room for an extension of the Library, to which they solicit the contributions of members—and adequate space for the monthly meetings, and exhibition of objects on those occasions.

For the purpose of extending the basis of the Institute, and bringing its members into more frequent and pleasant communication with their friends throughout the country who may be members of provincial societies, the Committee recommend the reception of members of kindred

societies as "Associated Members," paying only half a guinea annually, and having the privileges of members except that of receiving the Journal gratuitously. They also recommend that Journals three years old and upwards should be supplied to members at 2s. 6d. per number when the stock on hand permits.

Amongst memorable incidents of the last year in regard to the promotion of archaeological purposes, the noble generosity of Mr. Joseph Mayer, to whose friendly assistance and sympathy in our objects the Institute has constantly been indebted, may well claim special commendation. Mr. Mayer, it will be remembered,—on the critical occasion when the authorities of the National Depository rejecting the urgent appeal of our President, Lord Talbot, and a very large number of the leading archaeologists of Great Britain, who were solicitous that the Faussett Collection should be secured for the British Museum,—came forward with the good feeling and liberality that have so often characterised his encouragement of scientific efforts, and he secured the prize when it was on the point of transfer to some continental museum. During the last year Mr. Mayer has made a donation to the town of Liverpool of this and his other collections of antiquities, the result of a life-time of keen research in bringing together so extensive a series in illustration of the arts and manners of bygone times. The gift is of no ordinary importance, its worth having been estimated on good authority at not less than 50,000*l*. It is scarcely needful to remark how much judgment and discrimination is requisite in the formation of so extensive an assemblage of examples of ancient art and relics of every description, to ensure the elimination of what is worthless and the acquisition of what is essentially precious, such as the treasures to which allusion has been made, the results of long research by Dr. Faussett; the precious Rolfe collection also, that had been happily secured by Mr. Mayer; the inestimable series of sculptures in ivory, known as the Féjervary collection, with many other admirable examples of art and antiquity with which the Institute has been familiar through Mr. Mayer's generous confidence. Many of these precious objects have been entrusted to us for exhibition in the temporary museums formed at our Annual Meetings. The members of the Institute who had the good fortune to be present at the Rochester Congress in 1863, will long remember with gratification the occasion then presented, through Mr. Mayer's liberality, of examining in detail the invaluable display of Kentish antiquities, formerly in possession of the Faussett family. Many of the archaeologists assembled on the present occasion will doubtless avail themselves of the opportunity of visiting the Museum recently founded at Liverpool, and of witnessing that lasting monument of Mr. Mayer's munificent devotion to the interests of science.

Of the various well-organised efforts for the extension of archaeological science during the past year, there is none that the Committee may hail with more lively gratification than the recent inauguration of the Blackmore Museum at Salisbury. It is doubtless well known to the members of the Institute that, in 1864, the generous project was devised by Mr. William Blackmore, of Liverpool and London, to establish on a permanent footing, and with all the accessories requisite for the object, a Museum in which the relics that illustrate the prehistoric and earliest periods, in all countries of the globe, should be combined in such serial arrangement as might, by ethnological induction, best tend to illustrate

the most obscure period of the unwritten history of Man. The Museum, founded and erected by Mr. Blackmore, admirably arranged by Mr. E. T. Stevens and Dr. W. Blackmore, was opened formally on Sept. 5, 1867, under the presidency of the Earl Nelson, with the co-operation both of leading members of the Wiltshire Archæological Society, and also of persons distinguished by their researches into our earlier vestiges—Mr. Evans, Mr. Prestwich, Mr. W. B. Dawkins, Mr. Franks, Prebendary Scarth, and other antiquaries—whose sympathies had been cordially enlisted in favor of an establishment, that promises to supply in England, with the admirable Christy Museum, now a portion of the National Collection, such ample means for public instruction as are to be found in no other country. An illustrated synopsis of the Blackmore Museum is in forward preparation.

In the customary retrospect, the losses that the Institute has sustained during the past year are comparatively few; several valued and early friends, however, to whose memory we desire to pay a tribute of esteem and hearty regret, have been removed from amongst us by death since our last Annual Meeting. Sir Charles Lemon, Bart., well known as an earnest promoter of all the purposes of science and archæology, more especially in connexion with his own county, and as President, during a lengthened period, of the Royal Institution of Cornwall. Shortly after the establishment of our Society he gave very friendly co-operation, and for some time was a member of the Central Committee. Another early friend also, recently deceased, must be named with regret, namely the venerable and learned Principal of Magdalene Hall, Oxford, the Rev. Dr. Macbride, with whose kindly encouragement the Institute was favored at an early period of its existence, and also more particularly on the occasion of the Annual Meeting held at Oxford in 1853.

Of distinguished archæologists in foreign lands, fellow-laborers in the prosecution of historical and antiquarian researches, mention must be made of one of our Honorary Members, André Pottier, of Rouen, whose attainments in the investigation of ancient arts and manners, and in many special subjects of inquiry that engaged the attention of many of our own members, need no commendation to those who have had occasion to pursue their researches in the valuable library of which he was for so many years the Conservator. The courteous liberality with which he drew forth his copious stores of knowledge, rendered him the most valuable auxiliary in all matters relating to the history of Normandy, its literature and antiquities.

Another friend and member, the sad intelligence of whose decease in distant lands cannot be suffered to pass without honorable mention, is the energetic explorer of the antiquities of Kertch and the Cimmerian Bosphorus, Dr. Duncan Macpherson, of the Madras Army. The relation that he gave to the Institute, at the Edinburgh Meeting in 1856, was a feature of no slight interest on that occasion, forming the ground-work of his valuable narrative subsequently published with numerous attractive illustrations. He returned to India on receiving a distinguished appointment, that gave favorable occasions for the prosecution of antiquarian researches, the promised results of which are now unhappily lost to us.

Of those lately deceased, who took part with us from an early period of our enterprise, may be named with regret the late Rector of Stockton, Wilts (the Rev. T. Miles), for many years a Member of the Institute;

well known also as a diligent investigator of the antiquities of the county in which he long resided, and through whose exertions Wiltshire Topography has been enriched by several valuable contributions.

Our lamented friend Mr. Felix Slade will long be remembered with very sincere esteem and regret ; his genial encouragement frequently cheered our exertions, and he was ever foremost in the liberal production of his various treasures to augment the interest of our meetings. His precious collection of works in glass of all periods has happily passed, with other generous bequests, into the National Museum. He has founded, with ample endowments, professorships of the Fine Arts both at Oxford and Cambridge, and in University College, London. His cordial sympathy in our special pursuits, and his regard for his friends both of the Institute and the Society of Antiquaries, to the latest period of his life, was marked by the considerate legacy of 100*l.* to either Society, in furtherance of purposes that had ever received his friendly encouragement.

The following list of members of the Central Committee retiring in annual course, and of members of the Institute nominated to fill the vacancies, are recommended to the Meeting.

Members retiring :—The Hon. W. O. Stanley, M.P., *Vice-President* ; Sir Jervoise Clerke Jervoise, Bart., M.P. ; W. Warwick King, Esq. ; Col. Pinney, M.P. ; Albert Way, Esq., M.A., F.S.A., *Hon. Sec.* ; Professor R. Westmacott ; Bernard B. Woodward, Esq. *Auditor*, John Stephens, Esq. The following gentlemen being elected to supply the vacancies :—Albert Way, Esq., M.A., F.S.A., *Vice-President* ; Capt. Brackenbury, R.A. ; Rev. R. P. Coates ; J. Dunn Gardner, Esq. ; Sir Joshua Rowe, C.B. ; John Stephens, Esq. ; the Hon. W. O. Stanley, M.P. *Auditor*, Sir Sibbald D. Scott, Bart.

The adoption of the report and balance-sheet was then moved and seconded, and carried unanimously.

Mr. BURTT brought forward and proposed the adoption of the recommendations of the Central Committee—that members of kindred societies be admitted as “Associated Members” of the Institute on the payment of half-a-guinea annually, with all the privileges of members except that of receiving the Journal gratuitously ; and that Journals three years old and upwards be supplied to members at 2*s.* 6*d.* per number, if the stock on hand permits.

These were seconded by Mr. TALBOT BURY, and, after some discussion, were carried.

Mr. FAIRLESS BARBER adverted to the proposals he had submitted for extending the operations of the Institute.

Mr. BURTT said that the Committee were very sensible of the value of these suggestions, but there were difficulties in the way of carrying them out in their entirety. They were, however, under consideration.

The place of meeting for 1869 was then discussed. The claims of Hereford, Southampton, Bury St. Edmunds, and Glasgow were respectively considered ; and it was stated by the Secretary that the best promises of support had been received from Glasgow.

It was eventually moved by Mr. PARKER, seconded by the Rev. W. DYKE, and carried—that the place of meeting for 1869 be referred to the Central Committee, in London, with a recommendation that it should be some place south of Trent.

Lord TALBOT DE MALAHIDE then moved, and Mr. BERESFORD HOPE,

M.P., seconded, a vote expressing the great regret of the meeting at the retirement of Mr. Albert Way from the active position of Hon. Secretary, which he had so long occupied, and their grateful thanks to him for his constant services on behalf of the Society.

With a vote of thanks to the Chairman the proceedings terminated.

Friday, July 31.

At ten o'clock a meeting of the Section of Antiquities was held in the Music Hall, Mr. Beresford Hope, M.P., in the chair.

In the absence of the author, Dr. MOORE read a memoir by Dr. Robson, of Warrington, on "The Roman Roads in Lancashire and North Cheshire":—

It may be useful to make a few preliminary remarks on the expressions *Roman Road* and *Roman Station*, for the purpose of removing a certain mystery that hangs about them. What is a Roman Station? Is it a city, town, village, or a mere house? Wherever Roman pottery or even coins have been found, some would at once assume there was *the* Roman station; and where a seam of gravel more or less regular, or even a straight line of road is visible, it would be pronounced to be *the* Roman road—as we generally have the definite article prefixed.

It certainly would be a boon to all inquiring archaeologists if the word *station* in this use was altogether laid aside. If any remains turn up, showing that the Romans have occupied any locality, let them be described for what they are—city, fortress, villa, post-house, burial place, or whatever else may best describe it; but till a Roman station is actually defined, the term is worse than useless.

If we examine the accounts given us of the Roman roads in England—and they are not wanting in number nor a certain sort of particularity—we are struck with a similar vagueness and want of precision. Is the road one constructed by, or only used by the Romans? No doubt they had their military roads, vicinal roads, &c., as we have highway, cross, and occupation roads; but could a stranger say whether any road is highway, cross or occupation road? Gentlemen who have deserved well of archaeology, and who have traced the lines of these roads with unflagging spirit, have seldom let us into the secret of what their subject actually consisted; and all that we can learn, or rather guess at, is that from time to time they came upon tracts of gravel, or a rise in the hedge cop, which they considered sufficient evidence of a Roman road.¹

If we agree with the late Mr. Kemble that the island in the fourth century was as populous and as well cultivated as in the reign of Queen Anne, we may readily conclude that the roads also would be as numerous, and that the course of the highways would be pretty much the same. In the fourth century we know that the roads in the empire generally were in bad repair, and those in this island could have had little done to them, either then or afterwards. Still, the lines of road must have continued the same.

The names *Street*, *Stretton*, *Stretford* have been considered as marking the course of these early roads, and we have a number of such names in

¹ In fact, the remains of the roads which show Roman work are very scanty, and it would be difficult, if not impossible,—

where all that is to be seen is a layer of gravel or a rude pavement,—to say at what time it was made or repaired.

Lancashire and Cheshire. Other names, as Walton, Whitby, Whitacre, &c., have also been supposed to refer to a Roman road, but the value of this assumption is doubtful.

The Roman towns in Lancashire and the bordering county to the south are not numerous nor of great importance, with one exception, Chester. Manchester was probably an early border fortress, and also Melandra or Gamesley Castle, on the edge of Derbyshire, now a pasture. Ribchester appears to have had a temple of some magnitude ; but whether it has ever been fortified may be doubted, and the place has certainly been of no great extent. Lancaster seems to have been something like Manchester, a walled fortress, and Overborough may be compared with Gamesley, another fort utterly deserted. We may take it for granted that the Romans had ways to get from one place to another, and much labour has been gone through to trace the course which it is assumed each road took. About the middle of last century several gentlemen entered into these investigations, as Percival of Royton, Watson of Stockport, Whitaker of Manchester ; but the results recorded are not very satisfactory, as the account of the structure and character of the roads is very imperfect.

Whitaker asserts that all the roads from Manchester issued from the eastern gate, soon, however, sending off branches in various directions from the original stem, "which was cut down there from the surface to the base in 1765, and the materials of it lay plainly distinguished from the natural gravel of the ground, by the molted bricks and broken mill-stones which were found incorporated with them. It appeared to be constructed of a strong gravel, mingled with large boulders and fragments of rock ; and the whole was about fourteen yards in breadth and one and a half in depth." (*Hist. Manch.* 119).

Soon after leaving Manchester, it is described as "a ridge sixteen or seventeen yards in width, three-quarters of a yard in gravel and one in marl laid upon it." (*Ibid.* 120.) This ridge, with the traces of gravel more or less distinct and with occasional obliterations, constitutes Whitaker's Roman road to York. It was nearly due east, and about three miles from Manchester crosses a piece of moss by an embankment, which is much above the level of the meadows on each side, which Whitaker says "carry the grandest appearance of any remains I have seen in the island" (p. 123.) He then goes on—"From a large opening I made into the moss below the Roman gravel they appeared to have trenched the line of the moss that was destined to receive the road very deeply on either side, and the larger and more solid plates of turf, which rose with the shovel from the lower parts of the trench, they laid upon the original face of the bog and raised the level of it more than a yard in height. For on sinking a pit along the side of the gravel, and a yard and a half into the black soil, no ling or heath was found upon the surface of the one and immediately below the other. It was first found about a yard below the surface, and it was then discovered in considerable quantities. The whole work was carried gradually sloping upwards from a broad basis of twelve or fourteen yards on the face of the moss, till at the height of nine or ten it terminated in a crest of three or four, and ran even with the firm ground at either end of it. And the Roman gravel appears heaped upon the loose soil, and raised near a yard and a half above it." (*Ibid.* p. 125).

Describing another road, he says (p. 155), "The seam of the gravel is

a proof of the road, as the ground is all actually clay, and the course of the ridge is very evident to the eye." Sometimes the ridge is ten or twelve yards in width, sometimes only three; and at others the course is only discoverable by the spade. In one place it was set with large boulders; and the small piece of it which was laid open by the spade in Blackrode appeared to be a regular pavement, firmly joined together, and composed of heavy boulders (p. 157). In passing over the stony knolls (near Kersall Moor) "it is seen at once in pretty good preservation, being a strong thick gravel three yards in breadth, and lying upon the natural bed of clay and marl (p. 170). Near Castlefield, in Manchester, a pavement was dug up, consisting of the largest boulders, and having two layers of stones upon a bed of gravel (p. 171). Whitaker supposes that the gravel was derived from the beds of the Medlock and Irwell. But while he admits such gravel of itself would not make a road, he does not tell us how it could be made useful, or how the Romans added the requisite sand and loam to make it available (p. 173). A road in Yorkshire, between Cullingworth and Hainsworth, is "a paved way more than twelve feet broad, and neatly set with the stones of the country" (p. 192). His description of the road at Haydock is, that "running about 300 yards along the edge of the paddock, it crosses the back avenue to the house (Haydock Lodge), and is levelled to admit the plane of it" (that is, it was cut through, and forty years since offered a complete section on each side), "and about as many yards of it are very perfect, and 150 in the middle as complete as they were originally" (p. 210).

Whitaker's summary does not give us any favourable impression of his knowledge of road making, or of the structure of the roads he traced. "The Roman roads appear not to have been constructed upon the most sensible principles in general. That over Newton Heath is a mere coat of sand and gravel, the sand very copious and the gravel weak, and not compacted together with any incorporated cement; and that at Haydock is only a heap of loose earth and rock laid together in a beautiful convexity, and ready to yield and open on any sharp compression from the surface" (p. 217).

We may now proceed with inquiring what later investigators have done in the same field.

In the 1st vol. of the Transactions of the Historic Society of Lancashire and Cheshire is a paper by the late Mr. Just, then Master of the Grammar School at Bury, especially concerning Mr. Just's views of the 10th Iter of Antoninus, which he supposes entered Lancashire at Stretford, proceeding by Manchester and Blackburn to Ribchester, and afterwards over an almost impassable country to Overborough. Here again we have such expressions as "throughout the parish of Redcliffe its remains are frequently evident and occasionally very conspicuous" (p. 71); "numerous most marked remains may be met with between Ramsgreave and the Ribble, one or two nearly as perfect as when the last Roman soldier marched homeward from the spot; several of the stones which his predecessors placed there still remaining unmoved from their places" (*ibid.*). Elsewhere, it is "evident," "Roman remains continue at intervals." "Here are some parts of the road almost perfect." But nowhere does he tell us what was really to be seen.

In the same vol. we have "a notice of recent discoveries in Chester by Mr. Ayrton." We have something more precise. "What was probably

the original foundation of the east gate was exposed, and two pavements were discovered, one at the depth of three feet, the other nine feet beneath the present surface. They were quite perfect, and had never been disturbed; they were exactly similar to the paving of the present street" (p. 82). It will not be necessary to quote more of the very vague expressions which we have above; but in the description of a road between Ribchester and Clitheroe, on the brink of Pendeton Brook, Mr. Just tells us "The agger has been levelled near to the brook, and a section made of it worthy of inspection. The gravel has been spread on the surface of the ground, and a thin charred line marks out the sward covered over by the road-makers. Upon this stratum of gravel a course of flags has been laid, nicely fitting one with another, though not apparently of any definite shape or size. The flags form a nice, rounded, compact surface, now covered with eight or ten inches of soil, and of the exact width of twenty-one feet. This is the most complete patch of the Roman road to be met with in Lancashire along this Iter." (Hist. Soc. iii. 7.)

There is a piece of road, marked Roman in the Ordnance Survey, on the hill side below Bucton Castle, which externally resembles this, but is not quite so wide. It is still used as a road, and what the substructure is I cannot say; but it can hardly be gravel. It consists of rough flags and boulders, fitted together to form a tolerably level pavement.

The line of road from the Wyre, eastward, has also been traced by the Rev. W. Thornber, who says "that he saw a beautiful section of the agger a little to the east of Kirkham, where he found two roads running side by side, perfectly distinct—the one on the left being three yards wide, consisted of a pretty deep layer of shingle; the other ten yards wide, of the coarse red sandstone of the neighbourhood. Trenches were cut between and at each side of them" (Op. cit. p. 617).

These roads, which for the most part seem to have been formed of gravel, sometimes set, but commonly loose and easily scattered, must have been anything but durable—in fact, hardly better than our cindered country lanes, the cinders being replaced by common gravel.

But the roads in North Cheshire offer other peculiarities, and show much more scientific road-making. These we shall endeavour to identify with portions of the 2nd and 10th Itinera of Antoninus, one being on the road from York to Manchester, and the other forming part of the great North Road on the western side of the island.

At Stockton Heath, Appleton, and Wilderspool, various sections have been made at different times, and the result has always been the same. First, a foundation of fragments of sandstone of 4 to 6 lbs. weight has been laid on sand, five or six yards in breadth, and upon this there is a layer of gravel eighteen inches thick, sloped off from the centre, with shallow ditches on the sides, so that the road has been effectually drained. In Delamere Forest there is a piece of road (pointing to Chester) over the sandstone rock with the cart ruts and horse track quite distinct, with ditches and parallel cops on each side. In the continuation of this road the foresters say they find a strong bed of gravel a foot and a half below the surface. The road at Haydock, which Whitaker professes to describe, when cut through offered a section of exactly the same character as at Appleton—a foundation of broken sandstone, covered with a layer of gravel. In fact, it is precisely the same sort of road as we find

our Civil Engineers now making where durability is the object, except that, instead of gravel, they use the small broken stones called macadam.²

There is a very curious piece of road on Furness Fell, which was pointed out to me by Mr. Still of the Ordnance Survey. It is across some marshy ground at the foot of a hill, not more than 4 ft. wide, formed of small stones placed edgeway up, with a narrow border of curb stones on each side. By whom or for what purpose it was made I do not know.

The most important work touching the topography of Roman England, is undoubtedly the *ITINERARIUM* of ANTONINUS. In the form we now have it, it includes fifteen Itinera or Routes, each comprising a number of names and distances, forming however a complete network of corresponding roads over the whole of England. The difficulties of identifying these places have been acknowledged by archaeologists and topographers from Camden downwards; and the nature or object of the *Itinerarium* itself has been a matter of doubt to our own time.

An analysis of these fifteen routes will show that they form one great system, with three subdivisions, each having what may be considered its own centre. These three centres are York, London, and Silchester; perhaps Chester and Wroxeter may be considered as subcentres.

The first route is from High Rochester (*Bremenium*), about 18 miles north of the Tyne, to York, proceeding however not by Newcastle, but crossing the Tyne some miles to the west, at Corbridge. It then goes through Durham (county) to Catteric bridge, and thence to York. There is a continuation to the east coast, perhaps to some port near Flamborough Head.

The second *Iter* commences on the western side of the kingdom, at Middleby, about 18 miles north-west of Carlisle, and, passing through Cumberland and Westmoreland, falls into the previous route at Catteric, and so goes on to York in a south-east direction. It is continued (south-west) by Manchester to Chester, and hence again it goes south-east by Wroxeter to London, along the old Watling Street to Sandwich or Richborough.

The third *Iter* is from London by the same route to Canterbury, ending at Dover; the fourth proceeding from Canterbury to Lymne.

The fifth *Iter* is a line through Norfolk (by Chelmsford and Colchester) through Cambridge and Lincoln to York, and is afterwards continued along the second *Iter* to Carlisle. The sixth also pursues the second *Iter* from London, by St. Albans and the Watling Street, to Claychester; from thence it goes by Leicester to Lincoln.

The eighth is from York to London, by Doncaster to Lincoln, as in the fifth, and then by Leicester and Claychester. The ninth is from Castor, near Norwich, through the Eastern Counties, Colchester and Chelmsford, to London.

The ninth *Iter* belongs to the Silchester centre. It is from some place on the south coast, by Southampton and Winchester to Silchester, whence it proceeds to London.

² The line of the present road corresponds with the old one, which it frequently crosses, showing that when

the latter got out of repair, travellers preferred the green sward on each side to it.

The tenth Iter has long been a *Crux Antiquariorum*, and will be noticed at length as belonging especially to our district. The next, from Caernarvon to Chester, connects North Wales with both the London and York divisions. The thirteenth is from Caerleon, by Gloucester and Cirencester, through Speen to Silchester. The fourteenth is another route from Caerleon, crossing the Severn above Bristol, and then proceeding by Bath and Speen to Silchester. The fifteenth is from Silchester by Old Sarum to Exeter.

It must be borne in mind that these Itinera, consisting merely of proper names and Roman numerals, were very liable to clerical mistakes, and that when once an error crept in, there was no means of rectifying it after the routes ceased to be made use of. The twelfth Iter is said to be from Silchester by Muridunum to Uriconium (Wroxeter). There are two Muridunums—one in the south of England, near Exeter; the other placed at Caermarthen, in South Wales. This last the scribe has confounded with the former one named in the fifteenth Iter. The first part of the twelfth corresponds with the fifteenth, while the second part belongs to South Wales, and runs from Caermarthen, by Neath and Caerleon, to Burrium (Usk), which appears in the next Iter, and then goes north to Wroxeter, making a direct connection between the Silchester and northern divisions.

With this summary of the Itinerarium of Antoninus, so far as it relates to England and Wales, before us, we may get some insight into its object from the following passage from the *Anecdota* of Procopius (p. 218, cap. xxx.):—"The Roman emperors of former times devised a plan, by which, whatever was doing among their enemies, any sedition or extraordinary occurrence in the cities, anything connected with the governors or prefects, should be told them, and come to their knowledge as soon as possible. The conveyance of the annual tribute was also safely and rapidly performed by the same means. This constituted the *Public Course*. Stations were fixed,—mostly eight, but never less than five,—as a day's journey for a well-girt man. In each station or stable were 40 horses, with attendants in proportion; and thus the couriers, having a constant change of trained horses, were able at times to go ten days' journey in a single day." He proceeds to speak of the profits which a neighbourhood made out of these establishments, as they were supported by the emperor's privy purse.³

The great object of these posts was to convey regular and sure intelligence to the seat of government; and officers called *Agentes in rebus* and *Curiosi*, who seem to have combined the functions of high police, postmasters, and imperial deputy lieutenants, had the superintendence of them. They included mules, asses, and oxen, with the farriers, smiths, and hostlers requisite for such establishments; carriages of various sorts, covered and uncovered, light and heavy, the weight allowed for each being fixed by imperial rescript. Certain great officers (in the fourth century the Pretorian Prefect and the Master of the Palace) were, besides the emperor, the only persons who could grant warrants

³ An examination of any map will show, that while all the important towns were thus linked together, there was no part of England but what was at a moderate distance, within call as it were, and

under the superintendence of a post-station. We want a map, however, which would distinguish the *Cursus Publicus* from the other roads.

for the use of the imperial posts, and then merely to the highest officers. Any attempt to abuse the privilege was severely punished. These stations or stages (on the Continent they are distinguished as *mutationes* where the horses were changed, and *mansiones* where the courier might rest for the night), were fixed only upon certain roads, very few indeed when compared with the rest, and bearing such a relation to them as the later mail-coach routes did to the highways.⁴

Of these post-routes there are two more particularly connected with Lancashire, and a short account of them will show the difficulties connected with the subject.

It has already been stated that the second Iter, in what may be called its second division, passes from York to Chester; about this there can be no doubt, and it is equally certain that the first stage from York was Tadcaster. At the Chester end we have Condate and Mamucium the latter place being acknowledged by all to be Manchester, between which and Tadcaster we have the desolate moors and mountains which have been called the "back-bone" of England. The Romans were well acquainted with all these passes, and we may reasonably suppose would take the easiest and most convenient for the post-road, and that which was the best then would be the best also in after times. The posting-road from York to Manchester, at the middle of the last century, was by Blackstone Edge and Rochdale, and it seems likely enough that it would be adopted by the Romans, as it is also the shortest. The only place between Tadcaster and Manchester⁵ named in the Iter is Cambodunum, placed 20 miles from the former, and 18 miles from the latter. It is clear that one, or most likely two post-stages have been omitted by the copyist, and that any attempt to identify Cambodunum must fail, as we do not know whether we have to look some 20 miles from Tadcaster, or 18 from Manchester for it. The route from Manchester to Chester, however, is more clear. The intermediate stage is Condate, 18 miles from the first, and 20 from the second place. Now we have two distinct roads between the two cities, one by Wilderspool, the other by Northwich, both certainly used by the Romans. Looking at the figures we should fix Condate at Wilderspool, as the distance exactly corresponds, it being 18 miles from Knott Mill at Manchester, and 20 from Chester. The distance of the last-named place to Northwich being 18 miles, and from thence to Manchester 20.

All these establishments in this island came to an end with the fifth century, and if a mistake occurred either in the numerals or the omission of a name, there were no means of setting it right, or indeed any object in doing so; and yet, considering everything, these Itinera afford abundant proof of the great care that was bestowed upon them. The tenth Iter has perhaps been the most puzzling, and given rise to the most discordant opinions. It is however now generally acknowledged that it ran on the west side of the kingdom, beginning probably at a seaport in Cumberland, and passing through Westmoreland and Lancashire to the salt district in Cheshire. It is singular that, with the exception of Condate, not a single name in it occurs elsewhere. If then we start at Middlewich,

⁴ The Codex Theodosianus has very minute directions as to the administration of the *Cursus Publicus*, which deserves more attention than has yet been paid

to it.

⁵ The actual distance of Manchester from Tadcaster is 58=64 Roman miles. The Iter only gives 33.

and assume it to be Mediolanum, at 17 miles on the line of King Street and the road already described at Appleton, we come to Stockton Heath and Wilderspool, where abundant evidence of Roman occupation, in the shape of pottery, coins, funeral urns, &c., has been discovered. From hence a road has been traced on the line of the present great North Road by Newton (where it existed, as described, within the last thirty years), Wigan, Walton le Dale, Garstang, to Lancaster. On this route, except at Lancaster, there has been nothing that could be considered as a fortification. These post-stations seem all to have been situated on the south bank of a river, the Dane, Mersey, Douglas, Ribble, &c.; and it seems that such establishments should be sought for, not within a fortress or city, but on the outskirts. In fact some of the large towns, Wroxetér, Aldborough, Ribchester, seem never to have been fortified; in other places, as at Silchester, Lancaster, and Manchester, the walls have been allowed to go to decay, while a mere fortress seems hardly to have been repaired after its erection, as Gamesley and Overborough, now mere green fields. Wherever there was no navigable river a Roman city, however rich and extensive, went to ruin; while those under different circumstances, as York, Lincoln, Leicester, and London, in fact most of our old cities, are flourishing to the present day, whether captured by the Saxons or not. In fact, I believe that all those places which had not a commercial site were decayed in the terrible period of the third and fourth centuries. As far as our knowledge goes, the Roman sway in England seems to have been exercised with great mildness, and to have been really beneficial to the people, who were certainly much worse off for many centuries after acquiring their independence than they were before.

The post-stations on the second Iter (from Chester to York) were, Condate 20 miles; Mamucium 18 miles. The southern terminus of the tenth Iter was Mediolanum, which was 18 miles from Condate, 17 miles to the north of which was Mancunium, somewhere near Wigan. The confounding Mamucium with Maneunium, and assigning both to Manchester, has made a puzzling subject utterly inextricable. It is curious that in all original documents and charters till the end of the fifteenth century (Domesday Book included), the name is written with *m*; and the late Mr. Harland edited, in 1861 and the following years, for the Chetham Society, several volumes under the title of "Mamecestre; being Chapters from the early recorded History of the Barony, the Lordship or Manor, the Vill, Borough or Town of Manchester;" but he does not allude to the earlier Roman name.

The evidences of Roman occupation may be seen at large in the volumes published by the Historic Society of Lancashire and Cheshire, and the Architectural and Archæological Society of Chester. A particular survey of the road from Appleton to Preston, corresponding with the tenth Iter, was made thirty years since by the Rev. Edmund Sebson of Ashton in Mackerfield, and published in the 1st edition of Baines' History of Lancashire.

Mr. BARBER said he had heard Mr. Sharpe mention an ancient road in that neighbourhood, and he should be glad if any one could give him information about it. The road was across a moss, and was now covered by a deposit of several feet of clay. It was a stone road, now covered with clay, and moss over it.

Dr. LEE said the road alluded to was on Pilling Moss. Some years ago

he visited the place, and found trunks of trees laid transversely, and other trees laid at right angles, and upon this was a sort of concrete of sand. He thought, however, that it was not a Roman road, but an early British road. He believed it was originally a road through a forest.

Thanks having been voted to Dr. Robson; the PRESIDENT called upon Mr. Parker to read his memoir on "Recent Archæological Discoveries in Rome." The time at disposal was very short, and Mr. Parker had to content himself with giving a summary only of his essay. He described the nature of the investigations which have now been proceeding for some time under his directions, the discoveries which have been made, and the results of the excavations made on the banks of the Tiber by direction of the Pontifical Government. These excavations had disclosed works of historic interest of the first century, almost as perfect as though they had only been built ten years. He thought from this fact that the works in question must have been buried by an inundation of the Tiber shortly after they had been built. Mr. Parker acknowledged the courtesy of the Pontifical Government in affording him facilities for carrying on the excavations, the only condition being that he should acquaint the Government with what he was doing from time to time, and perform the task as quietly as possible.

Dr. LEE proposed a vote of thanks to Mr. Parker for his valuable paper, and in doing so spoke at some length of the great services he had rendered to archæological science.

Soon after twelve o'clock there was an excursion by train to Cark station on the Furness line, and thence by carriage to Cartmel Priory Church. After passing through the varied and delightful scenery in which the ancient town of Cartmel is situated, the visitors entered the venerable fabric of St. Mary's Church. The church is cruciform, and the peculiarity of its external appearance is caused by the belfry being raised upon the arches of the central square tower, thus forming a square within a square. The Rev. J. L. Petit's lucid application of the excellent lecture he had delivered in Lancaster delighted everyone; and the varied objects of interest in and about the church were the subject of careful scrutiny and remark. Among these may be named the monumental slabs of the Priors of Cartmel, the library of ancient books in the vestry, containing many of the early fathers, the beautiful memorials of the Lowthers and Prestons, and the carved devices of our Lord's Passion on the stalls of the choir.

When the work of inspection had been concluded, the party, upon the invitation of His Grace the Duke of Devonshire, proceeded to Holker Hall, and were entertained in the most magnificent manner. The number was larger than the host had been led to anticipate, and the heartiest welcome was extended to all by His Grace and Lady Louisa Egerton. After passing through the Hall, the visitors adjourned to the grounds, where a large tent had been erected for their accommodation, and in which a luncheon of the most *recherché* character had been provided. Ample justice was done to the superb repast, and in reply to the cordial vote of thanks which was unanimously passed, His Grace expressed the great pleasure it had afforded him to entertain his visitors.

An alternative excursion started early in the morning to visit the early antiquities around Ulverstone. Dr. Barber, whose valuable memoir has been already noticed, arranged the excursion, and proposed to show

the earliest evidences of human occupation in that neighbourhood. Doubtless the shores of Morecambe Bay must have been a coveted spot to the aboriginal inhabitant, and to the foreign settler or marauder; and many a present inhabitant views with great interest the hut circles at Birkrigg and Foulda, the Druids' circle at Sunbreak, the barrow (?) at Aldingham, and Urswick "stone walls." All these, with Gleaston Castle, a quadrangular fortress of the "Edwardian" type, were visited by the Ulverstone party. It was but a small party, however, as might be expected in the face of the attractions elsewhere.

In the evening a *conversazione* was held in the temporary museum, which was densely crowded. Matters of business are generally banished from such gatherings, but on this occasion the Rev. Edward Hill, who had for twenty years arranged and superintended the excursions of the Institute, was to receive an acknowledgment of his friends' appreciation of his labours for them.

Mr. TALBOT BURY, on behalf of the subscribers to the gift, requested Mr. Beresford Hope to make the presentation of a Timepiece to Mr. Hill; explaining that it was meant as a simple acknowledgment of the obligations of the members and visitors who had been privileged for so many years to profit by Mr. Hill's exertions.

Mr. BERESFORD HOPE, M.P., in making the presentation, said he felt highly honoured at being the mouthpiece of the Institute on so interesting an occasion; and after explaining the absence of the President of the Meeting, proceeded in a humorous strain to eulogise the services rendered by Mr. Hill, to whom they were very much indebted for the pleasure they derived at those annual meetings. Deeply respecting and valuing the important information contained in the papers which were read—good and able as many of them were—yet there was a certain flavour and smack of *work* about them which made a pleasant excursion into the country highly enjoyable. He came to those meetings to be instructed, and he was thankful to be instructed, as they all were; but he knew that "all work and no play made Jack Archæologist a dull boy!" To whom were they indebted for the arrangement of these agreeable excursions?—to their old friend, Mr. Hill—who during the last twenty years had contributed to the recreation and instruction of 20,000 persons. How many thousand miles he had carried them in these excursions he (Mr. Hope) would not pretend to calculate, that was one of the mysteries which no archæologist, mathematician, or statician would ever be able to fathom. After expressing a hope that Mr. Hill might be spared for twenty years longer to direct the excursions, the speaker said it was the wish of the subscribers to give to their true and energetic friend a mark of their pure gratitude for services rendered so generously and at such sacrifices of time and his own personal comfort.

Mr. HILL, in returning thanks, said he felt very deeply the kindness of those who had presented him with such a memorial of their appreciation of his services. It had been a great pleasure to him to do what he could to benefit the Institute, and all persons attending its meetings; but he was afraid they must not look forward, even if he was spared so long, to his services for another twenty years, as his business arrangements interfered with his attendance at their annual meetings. He should, however, always be glad to do what he could to forward the interest of the Institute, and whether he attended or not he would retain very pleasing recol-

lections of the way in which he had always been received, and most especially should he remember their kindness here in Lancaster.

The Timepiece, which was a very elegant piece of workmanship, bore the following inscription :—"Presented to the Rev. E. Hill, M.A., as a small recognition of the valuable services rendered by him for many years in directing the excursions of the Royal Archaeological Institute, Lancaster, 1868."

On the motion of Lord NEAVES, a vote of thanks was accorded to Mr. Hope for his services, and the members shortly afterwards dispersed.

Saturday, August 1.

At 9.30 A.M. a large party left the Castle Station for Borwick, *en route* to Borwick Hall, Levens Hall, and Kendal. Borwick Hall is a fine and unimproved specimen of an Elizabethan manor-house, built by the rich Roman Catholic weaver of Kendal, William Blindloss. In the courtyard and before the hall was visited, Mr. E. Sharpe gave a short account of the building, and pointed out its most notable features. The hall passed by marriage into the Strickland family, and thence by purchase to the Martons of Capernwray. The hall contains a small domestic chapel and a priest's room adjoining, from which there is a trap door and secret passage for the escape of the celebrant of the rites of the Roman Catholic church when necessary.

Mr. SHARPE stated that a quantity of timber, evidently prepared for ship-building purposes, together with a Roman anchor, were found at the close of the last century about a mile from the spot where they were standing, and that near an adjoining farm-house, which is known as Dock-acre, there are said to have been found the steps of a Roman dock.

Returning to Borwick Station, the party continued their journey by rail to Milnthorpe Station, where carriages were in waiting to convey them to Levens Hall. The Hon. Mrs. Howard, the owner of Levens, has not occupied her Westmoreland residence for several years; but the large party of archaeologists were most courteously received by her representatives, the Hon. General and Mrs. Upton. The Rev. G. F. Weston, Vicar of Crosby Ravensworth, had kindly undertaken to prepare a descriptive Memoir on Levens; but before this was read the visitors had the opportunity of admiring the many beauties of one of the most charming and picturesque baronial residences of the district. The entrance hall is entirely wainscoted round with oak, in carved panels. On the walls are the quarterings of families who have been connected with Levens, and over the fireplace are the arms of Queen Elizabeth richly emblazoned. Several traces of the ancient "Peel" house which originally occupied the site of the mansion can be followed out. The gardens are magnificently laid out by a pupil of Le Notre. Mr. Weston's excellent lecture will be given entire in a future volume of the Journal, so that it is not necessary to follow him here. It is enough to say that he discoursed upon the vicissitudes and changes of the mansion, both architectural and historical, in most pleasant fashion.

After wandering about the beautiful grounds the party were most handsomely entertained by General Upton, in the name of the Hon. Mrs. Howard. A tent of ample dimensions was erected in the park, in which

a superb refection was spread, and ample justice done to it. At the conclusion of the repast the Hon. Secretary of the Institute was warned of the obligation incurred by all those hospitably entertained there to drink success to the house in the potent brew for which it is famous, yeilded "Morocco." Valorously defying all prognostications of ill, the "Constable," as the large quaint goblet is called in which the liquor was served, was emptied "at a wind," *stans pede in uno*, to the toast "Here's luck to Levens while the Kent flows," and the freedom of the hall was thus acquired by the party. Before the visitors retired Mr. Sharpe expressed their grateful acknowledgments to General and Mrs. Upton for the handsome entertainment they had provided, and proposed their healths, which were most cordially drunk. General Upton said it had given Mrs. Howard great pleasure to allow the society to visit Levens, and she had desired all possible facilities to be given them on the occasion. Mrs. Upton and himself had had great pleasure in receiving the party, and were happy to find the visit and the reception had afforded the visitors so much gratification.

Proceeding on to Sizergh Hall, another fine specimen of a baronial mansion or stronghold, Mr. PARKER discoursed upon its architecture and history. The building was most freely thrown open by W. C. Strickland, Esq., and may be said to have been explored from turret to foundation-stone. The thickness of the walls of the southern tower showed that it was erected for real defence. It is surmounted by a watch tower, terminating in an embattled turret. The richness of the carved oak in the drawing-room attracted much admiration. In this room were portraits of many of the Stuarts, Charles II., James II. in armour, and his Queen, the Pretender and his wife, &c. The ancient armour, the portraits, the tapestry, and the remarkable furniture, with which the place abounds, were rapidly surveyed, for time only admitted of a very limited stay. The Katherine Parr chamber naturally came in for a large share of attention. Mr. Parker thought the more ancient part of the building had been erected in the reign of Edward III. ; but other parts were of the time of Elizabeth. He also directed attention to the fine old roof and battlements as being very remarkable.

On leaving Sizergh, the party were conveyed three miles farther on the north road to Kendal, the main object being to inspect the parish church. This church, dedicated to the Holy Trinity, is one of the largest in the kingdom, and remarkable as having four aisles co-extensive with the nave and chancel. The length from east to west is 140 feet, the width 103 feet. The greatest part of the fabric is of the 15th century ; but there are portions, probably, as early as the 13th century. In it are the chapels of the Parrs, the Stricklands, and the Bellinghams. Archdeacon Cooper read a memoir upon the church by the Rev. Mr. Crowther, that gentleman being unable to be present. Mr. Parker expressed his admiration of the remarkable size of the church, which he had never seen before, and which he thought would have stood higher in Mr. Dennison's list, in regard to area, than he had placed it. He attributed the size of the aisles to the various chantry chapels into which the place was partitioned having been taken down, as the early English aisles would not have been half that width.

The company then adjourned to the Town Hall, where refreshments had been provided by Archdeacon Cooper and the Mayor of Kendal. In the interval which occurred before the refreshments were served the

Mayor gave an account of the Stricklands of Sizergh Castle. The family were first met with at Strickland, near Shap, where they held estates and from which they derived their name. This was originally spelt Stirkland, an old Saxon name, and there seemed little doubt that the family was Saxon and resident at Stirkland before the Norman Conquest. From about the year 1250 the Stricklands had lived at Sizergh, and held the demesne lands belonging to the family in uninterrupted lineal descent from father to son in the male line to the present day. The Mayor concluded by furnishing several illustrations of the high condition and importance of the family.

Dr. CHARLTON proposed a vote of thanks to Mr. Strickland for opening Sizergh to the Institute, and for his kind reception of the members and visitors. The last syllable in the name of the place was peculiar to Westmoreland, and he believed with the Mayor that the family was certainly *pre-Norman*. He trusted that the ancient descent would be continued in the direct line as long hereafter as it had already existed.

After the repast Mr. SHARPE proposed, on behalf of the Institute, their acknowledgments to the Archdeacon and the Mayor for their acceptable entertainment and the pleasure they had derived from their visit to Kendal and its remarkable parish church. This was duly seconded, and met with the expression of the guests' very cordial approval.

The ARCHDEACON and the MAYOR briefly responded, and the party returned to Lancaster by a special train.

Monday, August 3.

A considerable number of excursionists started for Skipton at an early hour. Skipton Castle was reserved for the return, and carriages being in readiness at the station the party drove off at once to Bolton, to inspect the ruins of the grand abbey there. Here they were received by Archdeacon Robinson, the vicar, and conducted to the chief points of interest. The abbey belonged to the Augustinian order, and the plan of the buildings differed in many respects from that of the Cistercian order as seen at Furness. The church was large in comparison with the domestic buildings, which were evidently designed for a small number of monks, and which, although entirely demolished, were still traceable by their outlines on the turf. The dimensions of the cloister, which was remarkably small, were shown by the elegant lancet arcade on the south side of the nave of the church which had no south aisle. The Chapter House, on the south side of the south transept, was a small octagon, thrust out to the east beyond its usual place. It was approached by a long vestibule, the fraternity occupying the rest of the eastern walk of the cloister. The south walk was entirely occupied by the Refectory, which, unlike those of the Cistercian order, was placed alongside the cloister, and not at right angles to it. Very considerable portions of the transepts remain. The nave has been thoroughly restored by the Duke of Devonshire, and is used as the parish church. The earliest portions of the ruins are remains of a twelfth century building; but as the establishment prospered the structure was much enlarged in the fourteenth century. The materials of the earlier building were used in this later structure. Within the choir on both sides there is an elegant arcade of interlacing arches, and a founder's monument in the south wall. Mr. Sharpe ably described the existing

remains, and the Rev. J. L. Petit and Mr. Parker had an earnest discussion upon that oft *vexata questio*, the introduction of the pointed arch.

A good ramble along the picturesque banks of the Wharfe was then indulged in by a large portion of the party, some of whom even reached the Skid, famous in legend for the accident to the Boy of Egremound, and as having led to the removal of the abbey from Embsay to Bolton. After lunch at the Devonshire Arms Hotel, Skipton Castle was visited. It is remarkable as having been demolished by order of the Commonwealth, and restored in a massive style by the Lady Anne Clifford, Countess of Pembroke, Dorset, and Montgomery, and Lady of the House of Craven in 1657-8. Instead of battlements over the gateway, the stone parapet is pierced with the motto "Désormais." After a visit to the church of Skipton the members and visitors returned to Lancaster.

Tuesday, August 4.

The Historical Section met at 10 A.M. in the Music Hall, under the presidency of Lord NEAVES.

Mr. PARKER continued the subject he had commenced on Friday. He gave an account of the discoveries made by the British Archaeological Society at Rome, and produced a series of admirable photographs taken under his directions. The difficulties experienced in prosecuting those researches were often the subject of amusing remark. Every accommodation was promised by Italian officials "to-morrow," but that to-morrow never came till the month of May when the English left Rome, and then *carte blanche* was given for all that was wanted—when it was too late. To take photographs in the catacombs was pronounced impossible by the Roman artists, on account of the smallness of the area and the necessity of artificial light which would create so much smoke as to prevent a negative being taken. These difficulties were however overcome by Mr. Parker's photographer, light being produced by the use of magnesium wire. Mr. Parker gave a full and most interesting description of the catacombs; and concluded by saying that the photographs he exhibited would be placed in the Bodleian Library at Oxford, and in the South Kensington Museum, for the use of the public.

The general concluding meeting was held in the Shire Hall at noon, under the presidency of Lord NEAVES. There was a goodly assemblage of the members of the corporation, the leading members of the Institute which had attended the meeting, and many ladies.

The CHAIRMAN, after apologising for the absence of Colonel Wilson Patten and Lord Talbot de Malahide, said that he was very glad to be able to speak of the meeting that was drawing to a close, as one of the most agreeable and successful meetings the Institute had ever held. Nothing could have exceeded the courtesy and attention with which they had been everywhere received. The excursions had been eminently successful, and had contributed greatly to the gratification and enjoyment of all who had joined them. Such visits of the Institute doubtless conferred great advantages on the localities they went to. They were the means of placing much information within the reach of the inhabitants of the district which they would probably not otherwise obtain; and for their sakes, and on account of the Society also, he had to express

their gratitude to those noblemen and gentlemen who had so kindly and cheerfully afforded every facility for carrying out the programme of the week's proceedings.

Mr. J. H. PARKER, F.S.A., then proposed the first resolution :—"That the thanks of the Royal Archaeological Institute be given to the Mayor and Corporation of Lancaster, the County Magistrates, the Directors of the Athenæum, the John o'Gaunt Bowmen, and the Committee of the Lancaster Mechanics' Institute, for the use of the Shire Hall, the Music Hall, the Mechanics' Institute, and Assembly Rooms, during the Congress." He said that the members of the Institute had never been received with greater cordiality than by the people of Lancaster; and every facility had been rendered those belonging to the Institute in carrying out the arrangements of the Congress. The rooms spoken of in the resolution had been well suited to their wants, and he thought the cordial thanks of the meeting were due to those public bodies which had so kindly met them on the occasion.

Mr. TALBOT BURY having briefly seconded the resolution, it was put from the Chair and carried unanimously.

The MAYOR of Lancaster, in acknowledging the compliment conveyed by the resolution, said that personally he had derived very considerable pleasure from the visit of the Royal Archaeological Institute, and if the members of the Institute felt that the Corporation had in their preparations contributed in any way to the success of the meeting, he was sure the Corporation were amply repaid in the satisfaction they had experienced at the honour conferred upon the town by the meeting of so important a society being held there. It was not possible that men actively engaged in business could afford time to make themselves intimately acquainted with such matters as it was the particular object of the archæologist to investigate; but when their attention was drawn to those subjects by gentlemen well able to instruct and interest them, they then felt how much they were really indebted to the Archaeological Institute for the visit they had paid them.

Dr. MOORE also responded on behalf of the other bodies embraced in the resolution, with all of which he was more or less associated. He said, if the offer of those buildings on some future occasion would induce the Royal Archaeological Institute to make a second visit to Lancaster, he was sure that the various gentlemen who had charge of them would be happy to place them at the disposal of the Institute.

EDMUND SHARPE, Esq., moved a vote of thanks "To His Grace the Duke of Devonshire, the Honorable Mrs. Howard, W. Ramsden, Esq., Mayor of Barrow, and the Mayors of Lancaster and Kendal, for the courteous and graceful hospitality with which the Institute had been welcomed by them." It had been a matter of especial gratification to him as a member of the Institute of some twenty-four years' standing, and as a resident of Lancaster, to witness the hearty and cordial reception which had been given them on their visit. He thought he might fairly claim for the present generation a desire to exercise hospitality on the scale of former days. They had been entertained in a most princely style, and matters had been so well managed that the entertainment came at a time when refreshment was most required, and not unfrequently when there would have been no other way of obtaining it. He felt that they would cordially second his proposal,—That their best thanks be

tendered to those who had so handsomely entertained them during the past week.

The Rev. J. L. PETIT seconded the motion, and said if the success of their meetings was to be measured by the number and excellence of the entertainments offered them, and the liberality and hospitality of their entertainers, he must say that their meeting at Lancaster was one of the most successful meetings they had ever held.

The MAYOR of Lancaster acknowledged the compliment on behalf of himself and the noblemen and others referred to in the vote.

Mr. BURTT moved a resolution of thanks "To the contributors of papers and addresses to the meeting, and of objects of art and antiquities to the museum."

This was seconded by Mr. CARRICK. It was acknowledged by Mr. E. Sharpe, and seconded by the Rev. J. Davis.

Mr. PARKER proposed a vote thanking "Their Graces the Dukes of Devonshire and Buccleuch, the Visiting Justices of the County, the Incumbents of churches and other places visited by the Institute, for the kind facilities and attention shown by them on this occasion." This was seconded by Mr. C. Durnford Greenway, and acknowledged by the Rev. Dr. Lee.

The TOWN-CLERK moved a vote of thanks to the Hon. Secretaries of the Institute for the courteous and obliging manner in which they had conducted the business of the meeting. This was seconded by one of the Aldermen present, and duly acknowledged.

The further arrangements for the day,—the excursion to Cockersand Abbey in the afternoon under the direction of Dr. Lee, and the *conversazione* in the museum in the evening,—were announced by Mr. Burtt; and the proceedings were brought to a close by a vote of thanks to the Chairman.

THE MUSEUM.

It was long a doubt whether a museum of sufficient interest could be formed,—considering the attractions of the Art Exhibition at Leeds, and the rarity of fitting objects in Lancaster and the neighbourhood. The officers of the Institute, however, persevered, and the result has been an agreeable surprise to the Lancastrians themselves, and a great satisfaction to those even who have been present at the magnificent collections brought together at many of the preceding meetings of the Institute. The following is a summary of the principal contents of the museum.

Foremost among the contributors was Miss Ffarington, of Worden, who sent the only family portraits representing the gentry of the county exhibited, and which showed the alliances of her family with the Stanleys and Talbots; a valuable and interesting collection of documents, comprising a charter of Richard Bussel, circa A.D. 1120, granting the church of Leyland to the Abbey of Evesham; charters of Earls of Derby; accounts of fishing in the Ribble, temp. Elizabeth; rent rolls; inventory of the goods of Sir T. Talbot, of Bashall; privy signet letters under the autographs of Henry VII. and VIII., forbidding the tenants of Penwortham to wear any other liveries or badges than the king's. This lady also exhibited five cases of casts of seals from documents at Worden; some choice examples of ancient family plate, and miscellaneous objects;—among them a standing "salt," with cover, of the Elizabethan period;

Matthew Parker's seal as Dean of Canterbury, of silver, on an ash sprig ; a sapling cup of oak, now hooped with silver ; early silver spoons and forks ; three leathern "bottels" ; a firkin of leather, dated 1684 ; two "quaichs" of silver, mounted in the wood of the Betsey Cairns, the vessel which brought William III. to England, and used as a measure for a morning draught of whiskey. An ancient oak tankard, engraved in one of the early volumes of the Journal, was also exhibited by Miss Ffarington. Since that time the decayed wooden hoops have been removed, silver ones now occupy their places, and a silver lining has been added—needful and necessary repairs—showing the care taken by the owner to preserve so interesting a relic of the fourteenth (?) century. The Warrington Museum authorities forwarded some early antiquities of interest, comprising an Egyptian bread-mark ; Roman pottery of various kinds ; bronze spear-heads—one very fine and double looped ; palstaves and celts of various forms ; one of those curious figures called a "blow-fire" ; a "pocket pistol" of leather, of the 17th century. Mr. Charles Monkman, of Malton, sent a fine collection of flint arrow-heads, celts, hammers, &c., collected in the northern counties, together with some of "Flint Jack's" forgeries by way of contrast. Mr. Coupland supplied many excellent specimens of armour of various periods, and Dr. Moore contributed some very curious examples of South Sea weapons and armour. Mrs. Littledale furnished some specimens of Roman pottery ; a Roman engraved stone—a deed of gift (?) ; top of a *gypciere* ; a *couteau de chasse*, of 17th century, with carved ivory hilt ; a bifurcated arrow-head, probably of the 14th century. Roman pottery of various kinds, some very good, was sent by Mr. Howitt and Dr. Lee, and the "Runic Cross" of Lancaster was sent from Manchester. Among inscribed stones of early date must be named the Roman "Milliarium," found in digging the Lancaster and Preston Canal, and the dedication stone to the Emperor Trajan, whose carved inscription seemed as fresh as if done to-day. Among other objects of early date may be named a finely patinated spear-head, from Sherwood Forest ; others from Heysham ; and funereal urns of various types. The Lancaster Mechanics' Institute contributed two cases of Roman coins. Of the mediæval period must be named the charters of the borough, beginning with one of John Earl of Moreton, afterwards King. Some were marked as having been mutilated "when the towne of Lancaster was burned the 18 March, 1642." Mr. C. Durnford Greenway sent an acolyte's altar bell, a brass 15th century mortar, and some good specimens of enamel. The Rev. Oswald Master, of Croxton, supplied a rich toilet suit of Indian work in silver gilt, formerly belonging to Anne Countess of Coventry, and four caskets, two cups and a vase, of silver filagree with enamelled foliage.

Amongst the treasures exhibited by Miss Ffarington, two brigantine jackets must not be forgotten, as this armour, worn chiefly by archers, is, from the materials composing it, becoming daily more rare. It was composed of steel plates stitched between two pieces of canvas and then quilted on the outside in diamond and other shaped panes. These jackets were used during the second half of the fifteenth and throughout the sixteenth centuries.

Of course some singular specimens of crockery were brought to light, of the merits of which some of the owners previously thought little. There was a goodly array of Oriental china, jars, vases, and jugs of various kinds. Among them a quaint "puzzle-jug," of singular trickiness, claims

special notice. Only the lower part of the jug, which was globular, held the liquor; above it the sides were perforated. Into the globular portion the handle was inserted, and this was hollow and conveyed the liquor to the hollow rim in which were three small spouts. Two of these were to be stopped by the fingers while the third was drank from. The inscription is:—"Here, gentlemen, come try your skill;—I'll hold a wager if you will,—That you don't drink this liquor all—Without you spill or let some fall." And the chances seemed much against the drinker. The jug is probably English ware of the 17th century. It was contributed by Mrs. Peel.

On the walls were several large and fine series of water-colour drawings of Oriental scenes and objects, contributed by Mrs. Moore, the Rev. H. G. Weston, and the Rev. J. L. Petit. Many of Mr. Petit's have already furnished illustrations for the Journal of the Institute. A drawing of a bell at Claughton in Lonsdale, inscribed with the date of 1296, which has every appearance of authenticity, shows it to be the earliest dated specimen known. Among the objects contributed on this occasion, was an original drawing by Hogarth, of Simon Lord Lovat, "drawn from life at St. Alban's, in his way to the town, guarded by Major Gardner. Aug. 14, 1746." It is a bold, free sketch; but had been unfortunately cut out and badly mounted on fresh paper. It is the well-known likeness of that unfortunate nobleman so familiar to collectors of Hogarth's engravings.

The Central Committee desire to acknowledge the following donations on the occasion of the Lancaster meeting:—Octavius Morgan, Esq., M.P., V.P., 5*l.*; John Henderson, Esq., 5*l.*; G. T. Clark, Esq., 5*l.*; E. Smirke, Esq., 2*l.*; Miss Ffarington, 1*l.* 1*s.*; R. Ferguson, Esq. 2*l.*; Thos. Greene, Esq., 5*l.* 5*s.*; Thos. Norris, Esq., 2*l.*; Rev. Bernard More, 1*l.* 1*s.*; ——— Hornby, Esq., 1*l.*

Archæological Intelligence.

THE important results of Explorations of Vestiges of Ancient Rome under the direction of Mr. J. H. Parker, F.S.A., are well known to our members. See pp. 341, 346, *ante*. He has obtained full permission from the Pontifical Government to make excavations on several sites of great interest, but the work is suspended for want of adequate funds; it is hoped that the aid so greatly to be desired, will not be denied to our indefatigable friend. Donations are received by Messrs. Coutts, on account of the Roman Fund. Fifteen hundred photographs of buildings and objects of highly valuable character have been obtained, at Mr. Parker's expense; these may be purchased at very moderate prices. They may be inspected, and more full particulars obtained at Messrs. Parker's, No. 377, Strand, London.

The facsimile of the Domesday Survey of Kent, the last achievement by our lamented friend, the Rev. L. B. Larking, has been completed, and may be obtained from Mr. Toovey, 177, Piccadilly. The price of this admirable reproduction by the skill of Mr. F. Netherclift is four guineas. A Latin text (*in extenso*), translation, and Glossary are appended.

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